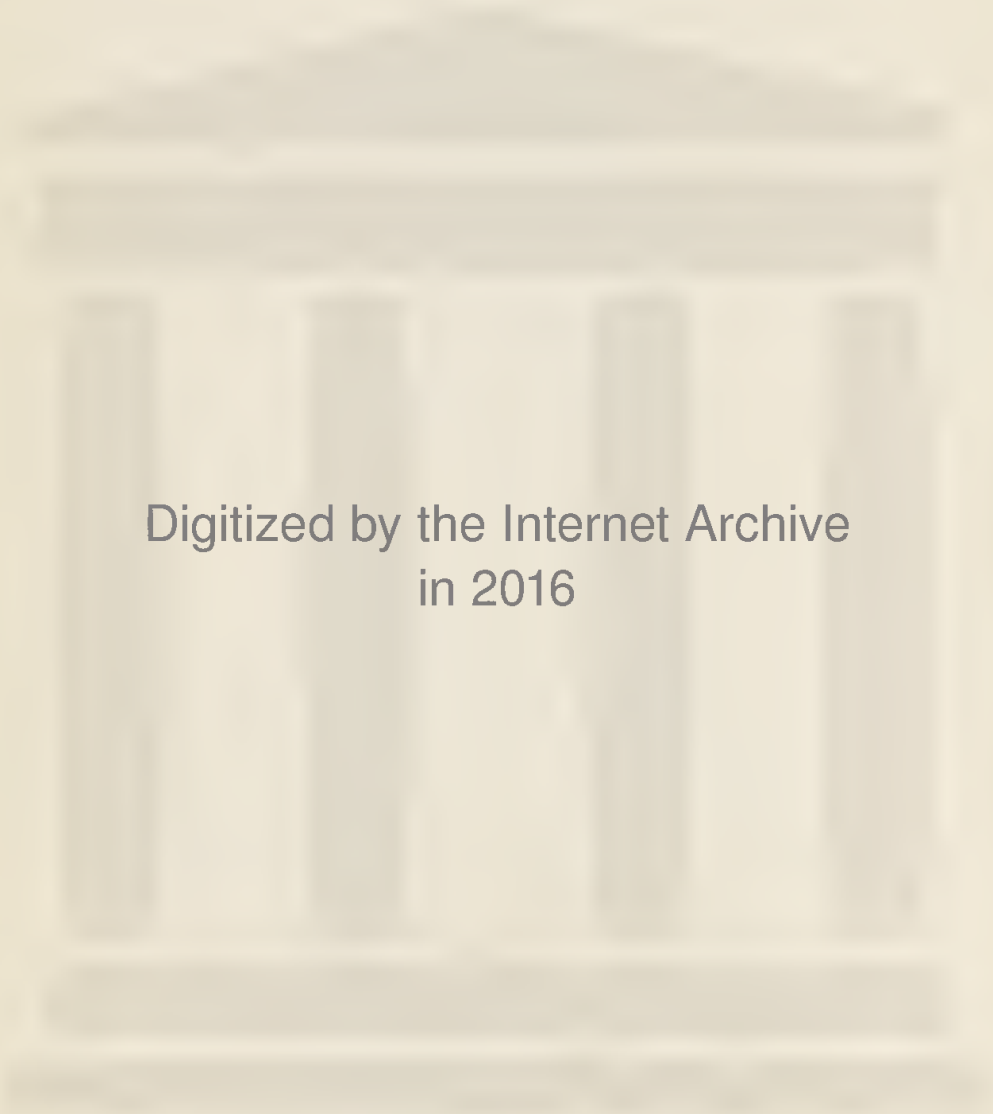
CURRICULUM

Ex libris
universitatis
albertaensis

Universal Bindery Ltd.
BOOKBINDING – GOLD LETTERING
Edmonton, Alberta


Digitized by the Internet Archive
in 2016

https://archive.org/details/chroniclesofcana32wron

CHRONICLES OF CANADA

Edited by George M. Wrong and H. H. Langton

In thirty-two volumes

32

THE RAILWAY BUILDERS

BY OSCAR D. SKELTON

Part IX

National Highways

'THE SURVEYOR, OFTEN AN EXPLORER AS WELL, STRIKING OUT INTO THE WILDERNESS IN SEARCH OF MOUNTAIN PASS OR LOWER GRADE'

From a colour drawing by C. W. Jefferys

THE RAILWAY BUILDERS

A Chronicle of Overland Highways

BY

OSCAR D. SKELTON

TORONTO
GLASGOW, BROOK & COMPANY
1922

Copyright in all Countries subscribing to the Berne Convention

UNIVERSITY LIBRARY
THE UNIVERSITY OF ALBERTA

F
5055
.G53
V.32
C.10

CONTENTS

		Page
I.	THE COMING OF THE RAILWAY	1
II.	EARLY TRAVEL IN CANADA	13
III.	THE CALL FOR THE RAILWAY	27
IV.	THE CANADIAN BEGINNINGS	36
V.	THE GRAND TRUNK ERA	52
VI.	THE INTERCOLONIAL	93
VII.	THE CANADIAN PACIFIC—BEGINNINGS	109
VIII.	BUILDING THE CANADIAN PACIFIC	131
IX.	THE ERA OF AMALGAMATION	169
X.	THE CANADIAN NORTHERN	181
XI.	THE EXPANSION OF THE GRAND TRUNK	196
XII.	SUNDRY DEVELOPMENTS	220
XIII.	SOME GENERAL QUESTIONS	240
	BIBLIOGRAPHICAL NOTE	248
	INDEX	249

115634

ILLUSTRATIONS

'THE SURVEYOR, OFTEN AN EXPLORER AS WELL, STRIKING OUT INTO THE WILDERNESS IN SEARCH OF MOUNTAIN PASS OR LOWER GRADE'. . *Frontispiece*

From a colour drawing by C. W. Jefferys.

THE FIRST RAILWAY ENGINE IN CANADA, CHAMPLAIN AND ST LAWRENCE RAILROAD, 1837 . . . . *Facing page* 38

From a print in the Château de Ramezay.

RAILROADS AND LOTTERIES . . . „ 48

An Early Canadian Prospectus.

SIR FRANCIS HINCKS . . . . . „ 66

From a portrait in the Dominion Archives.

RAILWAYS OF BRITISH NORTH AMERICA, 1860 (Map) . . . . . „ 92

SIR GEORGE SIMPSON . . . . . „ 110

From a print in the John Ross Robertson Collection, Toronto Public Library.

SIR SANDFORD FLEMING . . . . „ 114

From a photograph by Topley.

FLEMING ROUTE AND THE TRANSCONTINENTALS (Map) . . . „ 118

RAILWAYS OF CANADA, 1880 (Map) . *Facing page* 13

LORD STRATHCONA . . . . . ,, 13
From a photograph by Lafayette, London.

LORD MOUNT STEPHEN . . . . . ,, 14
From a photograph by Wood and Henry, Duff-town. By courtesy of Sir William Van Horne.

SIR WILLIAM CORNELIUS VAN HORNE . ,, 14
From a photograph by Notman.

RAILWAYS OF CANADA, 1896 (Map) . . ,, 18

CANADIAN NORTHERN RAILWAY, 1914 (Map) ,, 19

CHARLES MELVILLE HAYS . . . ,, 20
From a photograph by Notman.

GRAND TRUNK SYSTEM, 1914 (Map) . . ,, 21

CANADIAN PACIFIC RAILWAY, 1914 (Map) . ,, 22

GREAT NORTHERN RAILWAY, 1914 (Map) . ,, 23

RAILWAYS OF CANADA, 1914 (Map) . . ,, 23

CHAPTER I

THE COMING OF THE RAILWAY

)N the morning of October 6, 1829, there be-an at Rainhill, in England, a contest without arallel in either sport or industry. There ere four entries :

Braithwaite and Ericsson's *Novelty.*
Timothy Hackworth's *Sans-pareil.*
Stephenson and Booth's *Rocket.*
Burstall's *Perseverance.*

hese were neither race-horses nor stage-oaches, but rival types of the newly invented team locomotive. To win the £500 prize ffered, the successful engine, if weighing six ons, must be able to draw a load of twenty ons at ten miles an hour, and to cover at east seventy miles a day. Little wonder hat an eminent Liverpool merchant declared hat only a parcel of charlatans could have evised such a test, and wagered that if a ocomotive ever went ten miles an hour. he

would eat a stewed engine-wheel for breakfast!

The contest had come about as the only solution of a deadlock between the stubborn directors of the Liverpool and Manchester Railway, or tramway, then under construction, and their still more stubborn engineer one George Stephenson. The railway was nearly completed, and the essential question of the motive power to be used had not yet been decided. The most conservative authorities thought it best to stick to the horse; others favoured the use of stationary steam engines, placed every mile or two along the route, and hauling the cars from one station to the next by long ropes; Stephenson, with a few backers, urged a trial of the locomotive. True, on the Stockton and Darlington Railway, the first successful public line ever built, opened four years before, a Travelling Engine, built by the same dogged engineer, had hauled a train of some forty light carriages nearly nine miles in sixty-five minutes, and had even beaten a stage-coach, running on the highway alongside, by a hundred yards in the twelve miles from Darlington to Stockton. But even here the locomotive was only used to haul freight; passengers were still carried in

stage-coaches, which were mounted on special wheels to fit the rails, and were drawn by horses. The best practical engineers in England, when called into consultation, inspected the Stockton road, and then advised the perplexed directors to instal twenty-one stationary engines along the thirty-one miles of track, rather than to experiment with the new Travelling Engine.

'What can be more palpably absurd and ridiculous,' the *Quarterly Review* had declared in 1825, 'than the prospect held out of locomotives travelling twice as fast as stage-coaches! We should as soon expect the people of Woolwich to suffer themselves to be fired off upon one of Congreve's ricochet rockets as trust themselves to the mercy of such a machine, going at such a rate.' And the *Quarterly* was not alone in its scepticism. The directors of the new railway had found great difficulty in obtaining a charter from Parliament—a difficulty registered in a bill for parliamentary costs reaching £27,000, or over $4000 a mile. Canal proprietors and toll-road companies had declaimed against the attack on vested rights. Country squires had spluttered over the damage to fox covers. Horses could not plough in neighbouring fields.

Widows' strawberry-beds would be ruine
What would become of coachmen and coac
builders and horse-dealers? 'Or suppose
cow were to stray upon the line; would n
that be a very awkward circumstance
queried a committee member, only to gi
Stephenson an opening for the classic rep
in his slow Northumbrian speech: 'A
verra awkward for the coo.' And not on
would the locomotive as it shot along do su
varied damage; in truth, it would not go
all; the wheels, declared eminent exper
would not grip on the smooth rails, or else t
engines would prove top-heavy.

To decide the matter, the directors h
offered the prize which brought together t
Novelty, the *Sans-pareil*, the *Rocket*, and t
Perseverance, engines which would look almo
as strange to a modern crowd as they did
the thousands of spectators drawn up alo
the track on that momentous morning. T
contest was soon decided. The *Novelty*,
ingenious engine but not substantially bui
broke down twice. The *Sans-pareil* prov
wasteful of coal and also met with an accide
The *Perseverance*, for all its efforts, could
no better than five or six miles an ho
The *Rocket* alone met all requirements. In

eventy-mile run it averaged fifteen miles an our and reached a maximum of twenty-nine. 'ears afterwards, when scrapped to a colliery, he veteran engine was still able, in an emer- ency, to make four miles in four and a half inutes. 'Truly,' declared Cropper, one of he directors who had stood out for the station- ry engine and the miles of rope, 'now has eorge Stephenson at last delivered himself.'

Stephenson had the good fortune, he had arned it indeed, to put the top brick on the all, and he alone lives in popular memory. ut the railway, like most other great inven- ons, came about by the toil of hundreds of nown and unknown workers, each adding his ttle or great advance, until at last some enius or some plodder, standing on their ailures, could reach success. Both the char- cteristic features of the modern railway, he iron road and the steam motive power, eveloped gradually as necessity urged and roping experiment permitted.

The iron road came first. When men be- an to mine coal in the north of England, the eed grew clear of better highways to bear the eavy cart-loads to market or riverside. About 630 one Master Beaumont laid down broad

wooden rails near Newcastle, on which
single horse could haul fifty or sixty bushels
coal. The new device spread rapidly throug
the whole Tyneside coal-field. A centur
later it became the custom to nail thin strip
of wrought iron to the wooden rails, and abou
1767 cast-iron rails were first used. Carr,
Sheffield colliery manager, invented a flange
rail, while Jessop, another colliery enginee
took the other line by using flat rails bu
flanged cart-wheels. The outburst of can
building in the last quarter of the eighteent
century overshadowed for a time the growt
of the iron road, but it soon became clear tha
the 'tramway' was necessary to supplemen
if not to complete, the canal. In 1801 the fir
public line, the Surrey Iron Railway, wa
chartered, but it was not until 1825 that th
success of the Stockton and Darlington Ra
way proved that the iron way could be mad
as useful to the general shipping public as
the colliery owner. At the outset this roa
was regarded as only a special sort of toll-roa
upon which any carrier might transport goo
or passengers in his own vehicles, but expe
ence speedily made it necessary for the com
pany to undertake the complete service.

It took longer to find the new motive powe

ut this, too, first came into practical use in he land where peace and liberty gave industry the fostering care which the war-rent Continent could never guarantee. Nowadays t seems a simple thing to turn heat energy nto mechanical energy, to utilize the familiar xpansive power of water heated to vapour. Yet centuries of experiment, slowly acquired nechanical dexterity, and an industrial atnosphere were needed for the development of he steam-engine, and later of the locomotive. nventiveness was not lacking in the earlier lays. In the second century before Christ, Hero of Alexandria had devised steam founains and steam turbines, but they remained cientific toys, unless for the miracle-working urposes to which legend says that eastern riests adapted them. So in the seventeenth entury, when the Norman, Solomon de Caus, laimed that with the vapour of boiling water he could move carriages and navigate ships, Cardinal Richelieu had him put in prison as a madman. About 1628 an Italian, Giovanni Branca, invented an engine which had the essential features of the modern turbine, but his crude apparatus lacked efficiency.

Once more the coal-mines of England set invention working on a definite, continuous

object. As the shafts were sunk to low and lower levels, it became impossible pump the water out of the mines by hor power, and the aid of steam was sough Just at the close of the seventeenth centu Savery devised the first commercial stea engine, or rather steam fountain, which appli cold water to the outside of the cylinder condense the steam inside and produce vacuum; while Papin, one of the Huguen refugees to whom industrial England owe so much, planned the first cylinder and pist engine. Then in 1705 Newcomen and Cawle working with Savery, took up Papin's ide separated boiler from cylinder, and thus pr duced a vacuum into which atmospher pressure forced the piston and worked t pump. Next Humphrey Potter, a youngst hired to open and shut the valves of a Ne comen engine, made it self-acting by tyi cords to the engine-beam, had his hour f play or idling, and proved that if necessity the mother of invention, laziness is sometim its father. Half a century passed witho material advance; even as perfected in deta by Smeaton, the Newcomen engine require thirty-five pounds of coal to produce o horse-power per hour, as against one pou

to-day. Then James Watt, instrument-maker in Glasgow, seeing that much of the waste of steam was due to the alternate chilling and heating of the cylinder, added a separate condenser in which to do the chilling, and kept the temperature of the cylinder uniform by applying a steam-jacket. Later, by applying steam and a vacuum to each side of the piston alternately, and by other improvements, Watt, with his partner Boulton, brought the reciprocating steam-engine to a high stage of efficiency.

It took fifty years longer to combine the steam-engine and the rail. French and American inventors devised steam carriages, which came to nothing. England again led the way. At Redruth in Cornwall Boulton and Watt had a branch for the erection of stationary engines in Cornish tin-mines, in charge of William Murdock, later known as inventor of the system of lighting by gas. Murdock devised a steam carriage to run upon the ordinary highway, but was discouraged by his employers from perfecting the machine. Another mechanic at Redruth, Richard Trevithick, captain in a tin-mine, took up the torch, built a 'Dragon' for use on the common highway, but was baffled by the hope-

less badness of the roads, and turned to makin a locomotive for use on the iron ways of th Welsh collieries. Two years later, in 180 he had constructed an ingenious engine, whic could haul a ten-ton load five miles an hou but the engine jolted the road to pieces, an the versatile inventor was diverted to othe schemes. Blenkinsop of Leeds in 1812 ha an engine built with a toothed wheel workin in a racked rail, which did years of good se vice; and next year at Wylam on the Tyne colliery owner, Blackett, had the *Puffing Bil* built, and proved that smooth wheels woul grip smooth rails. Still another year, and a engine-wright in a Tyneside colliery, Georg Stephenson, himself born at Wylam, devise the *Blücher*, doubling effectiveness by turnin the exhaust steam into the chimney to creat a strong draught. Using this steam blast, an adopting the multitubular boiler from a Frenc inventor, Seguin, Stephenson finally score a triumph, due not so much to unparallele genius as to dogged perseverance in workin out his own ideas and in adapting the ideas o other men.

Thus by slow steps the steam railway ha come. It was a necessity of the age. Cruc means of transport might serve the need o

earlier days when each district was self-contained and self-sufficing. But now the small workshop and the craftsman's tool were giving way to the huge factory and the power-driven machine. The division of labour was growing more complex. Each district was becoming more dependent on others for markets in which to buy and to sell. Traffic was multiplying. The industrial revolution brought the railway, and the railway quickened the pace of the industrial revolution.

To some critics, as to Ruskin, railways have appeared 'the loathesomest form of deviltry now extant, animated and deliberate earthquakes, destructive of all nice social habits or possible natural beauty.' Animated and deliberate earthquakes they were indeed to prove, transforming social and industrial and political structures the world over. With the telegraph and the telephone, they greatly widened the scope and quickened the pace of business operations, making it possible, and therefore necessary, for the captain of industry or finance of the twentieth century to have under control ten times the press of affairs which occupied his eighteenth-century forerunner. The railway levelled prices and levelled manners. It enabled floods of settlers

to sweep into all the waste places of the earth clamped far-flung nations into unity, and bound country to country.

Nowhere was the part played so momentou as in the vast spaces of the North America continent, and not least in the northern half The railway found Canada scarcely a geo graphical expression, and made it a nation.

CHAPTER II

EARLY TRAVEL IN CANADA

BRITISH NORTH AMERICA before the railway came was a string of scattered provinces. Lake Huron was the western boundary of effective settlement: beyond lay the fur trader's preserve. Between Upper and Lower Canada and the provinces by the Atlantic a wilderness intervened. With the peninsula of Ontario jutting southwest between Michigan and New York, and the northeastern states of the Union thrusting their borders nearly to the St Lawrence, the inland and the maritime provinces knew less of each other than of the neighbouring states.

Settlement clung close to river, lake, and sea. Till the Eastern Townships were settled, Lower Canada had been one long-drawn-out village with houses close set on each side of the river streets. Deep forest covered all the land save where the lumberman or settler had cut a narrow clearing or fire had left a black-

ened waste. To cut roads through swam
and forest and over river and ravine d
manded capital, surplus time, and strong a
efficient governments, all beyond the pcss
bilities of early days. On the other hand, t
waterways offered easy paths. The St Law
rence and the St John and all their tributari
and lesser rivals provided inevitably the poin
of settlement and the lines of travel.

The development of water transport
Canada furnishes a record of the interactio
of route and cargo, of need and invention,
enterprise and capital. First came the ba
canoe, quick to build, light to carry round t
frequent gaps in navigation, and large enou
to hold the few voyageurs or the rich-in-litt
peltry that were chief cargo in early days.
was the bark canoe that carried explore
trader, soldier, missionary, and settler to t
uttermost north and south and west. F
the far journeys it long held its place. W
on into the nineteenth century fur trade
were still sending in supplies from Montre
and bringing back peltry from Fort Willia
in flotillas of great bark canoes. For short
voyages the canoe gave place to the larger a
clumsier bateau, the characteristic eighteent
century conveyance. After the War of 18

the increasingly heavy downward freight of grain and potash led to the introduction from the United States of the still larger Durham boats. Along the coast and on the Great Lakes the sailing schooner long filled a notable place. Finally the steamboat came. In 1809, only one year after the *Clermont* had begun its regular trips on the Hudson, and before any steamboat plied in British home waters, John Molson of Montreal with John Bruce and John Jackson—luckily for Canada not all three baptized 'Algernon'—built at Montreal the 40-ton steamer *Accommodation*. Seven years later Upper Canada's first steamboat was launched, the 740-ton *Frontenac*, built at the then thriving village of Ernestown. The fleet of river and lake steamers multiplied rapidly. The speed and certainty and comfort—relative, at least—of the steamboat at once gave a forceful impetus to settlement and to travel, and for some sections ended the pioneer period.

Meanwhile, the waterways were being improved. Little was needed or done in the great network of New Brunswick's rivers or in Nova Scotia's shorter streams, but on the St Lawrence system, with a fall of nearly six hundred feet from Lake Erie to tide-water at

Three Rivers, canal construction was impera tive. As early as 1779 canals were bui round the rapids between Lake St Louis an Lake St Francis, on the St Lawrence, with depth of only a foot and a half of water on th sills. Far westward, at Sault Ste Marie, th energetic North-West Company built, abou 1800, a canal half a mile long. In the earl twenties, after the failure of a private com pany, the province of Lower Canada con structed a boat canal between Montreal an Lachine, and a less successful beginning wa made on a canal round the Chambly rapid on the Richelieu. In Upper Canada th British government built the Rideau Cana chiefly for military purposes. The Wellan Canal was begun by a private company i 1824, opened for small boats five years late and taken over by the province in 1840, aft a record notable alike for energy and pe severance and for jobbery and inefficienc After the Union of 1841, when populatio revenue, and credit were all growing, energet digging was begun on the St Lawrence syste of canals, and by 1848 vessels of twenty-s foot beam and drawing nine feet of wat could sail from the ocean to Chicago.

Land transport came later than water tran

ort, and developed by slower stages. Road-aking was an art which the settler learned owly. The blazed trail through the woods fficed for the visit to the neighbour or the urch, or for the tramp to the nearest grist-ill with a sack of wheat on one's back. He who has been once to church and twice mill is a traveller,' the common saying n. The trail broadened to a bridle-road for ack-horse or saddle-horse. The winter, that aligned stepmother of Canada, gave the ttler an excellent though fleeting road on e surface of the frozen river or across the ard-packed snow. Through the endless vamps jolting 'corduroy' roads were built logs laid crosswise on little or no foundation. ith more hands and more money there came e graded road, fenced and bridged, but more rely gravelled. Finally, little earlier than e railway, came the macadamized road, and at peculiar invention of Upper Canada, the ank road, built of planks laid crosswise on a vel way, and covered with earth to lessen the ear and noise. Upon these roads carriole or lèche, 'cutter' or 'lumber-wagon,' carried e settler or his goods to meeting-place and arket. By 1816 a stage route was estab-shed from Montreal to Kingston, a year later

from Kingston to York (Toronto), and in 182
from Toronto to Niagara and from Ancast
to Detroit.

Road-making policy fluctuated between th
Scylla of local neglect and the Charybdis
centralized jobbery. At first the settler w
burdened with the task of clearing rough
the road in front of his own land, but t
existence of vast tracts of Clergy Reserves,
other grants exempt from clearing dutie
made this an ineffective system. Labour
roads required by statute, whether shar
equally by all settlers or allotted according
assessed property, proved little more succes
ful. On the other hand, the system of pr
vincial grants for road-building too oft
meant log-rolling and corruption, and in t
Canadas it was discontinued after the esta
lishment of municipal institutions in 184
The reaction to local control was perhaps t
extreme, and we are to-day recognizing t
need of more aid and control by the cent
provincial authorities. In the Maritime Pr
vinces the system worked better, and wh
the railway came these provinces possessed
good network of great roads and by-roa
without a single toll-gate. With the passi
of the Joint Stock Act by the Canadi

egislature in 1849, toll-road companies were reely organized, and many of the leading oads were sold by the government to these rivate corporations, and without question heir operations brought marked improvement or a time.

To realize more concretely the mode of ravelling before the railway came, let us nake the journey, say, from Quebec to oronto, at three different periods, in 1800, n 1830, and in 1850.

'In no part of North America,' wrote an xperienced traveller just at the close of the ighteenth century, 'can a traveller proceed o commodiously as along the road from uebec to Montreal.'[1] A posting service had been established which could fairly be ompared with European standards. At egular intervals along the road the traveller ound post-houses, where the post-master ept four vehicles in readiness: in summer he calèche, a one-horse chaise built for two assengers, with a footboard seat for the river and with the body hung by broad eather straps or thongs of bull's hide; in vinter the carriole, or sledge, with or without

[1] Isaac Weld, *Travels through the States of North America and he Provinces of Upper and Lower Canada* (Fourth Edition), p. 300.

covered top, also holding two passengers a
a driver. The drivers were bound to ma
two leagues an hour over the indifferent roa
and in midwinter and midsummer the de
terous, talkative, good-humoured driver,
marche-donc, usually exceeded this rate
most of the journey of three days. Fr
Montreal onward no one travelled in win
except an occasional Indian messenger. Ev
in summer few thought of going by la
though some half-broken trails stretched we
ward. The river was the king's highwa
The summer traveller at once purchased t
equipment needed for a week's river journ
—tent, buffalo-skins, cooking utensils, m
and drink—and secured passage on board o
of the bateaux which went up the river
irregular intervals in brigades of half a doz
The bateau was a large flat-bottomed bo
built sharp both at bow and stern, w
movable mast, square sail, and cross benc
for the crew of five or six. Sometimes
awning or small cabin provided shelter.
still water or light current the Fren
Canadian crew—always merry, sometim
sober, singing their voyageur songs, halt
regularly for the inevitable 'pipe'—rowed
sailed; where the current was strong th

kept inshore and pushed slowly along by 'setting' poles, eight or ten feet long and ron shod; and where the rapids grew too wift for poling, the crews joined forces on he shore to haul each bateau in turn by long opes, while the passengers lent a hand or shot vild pigeons in the neighbouring woods. At ight the whole party encamped on shore, recting tents or hanging skins and boughs rom branches of friendly trees. With average veather Kingston could be reached in seven r eight days; the return journey down-stream vas made in two or three. From Kingston vestward the journey was continued in a sail- ng schooner, either one of the government unboats or a private venture, as far as York, r even to the greater western metropolis, Queenston on the Niagara river. In good veather thirty or forty hours sufficed for the ake voyage, but with adverse winds from our to six days were frequently required.

Thirty years later those to whom time or comfort meant more than money could make he through journey in one-third the time, though for the leaner-pursed the more primi- tive facilities still lingered. For the summer trip from Quebec to Montreal the steamer had outstripped the stage-coach. Even with

frequent stops to load the fifty or sixty cords of pine burned on each trip—how many Canadian business men secured their start in prosperity by supplying wood to steamers on lake or river!—the steamer commonly made the hundred and eighty miles in twenty-eight hours. The fares were usually twenty shillings cabin and five shillings steerage, though the intense rivalry of opposing companies sometimes brought reckless rate-cutting. In 1829, for instance, each of the two companies had one boat which carried a cabin passengers for seven and six-pence, while deck passengers who found themselves in food were crowded in for a shilling.

From Montreal to Lachine the well-to-do traveller took a stage-coach, drawn by four spanking greys, leaving Montreal at five in the morning, for stage-coach hours were early and long. At Lachine he left the stage for the steamer, at the Cascades he took a stage again, and at Côteau transferred once more to a steamer for the run to Cornwall. Shortly after 1830 steamers were put on the river powerful enough to breast the current as far as Dickenson's Landing, leaving only a twelve-mile gap to be filled by stage, but in 1830 the

was still necessary, if one scorned the bateau, to make the whole journey from Cornwall to Prescott by land, over one of the worst through roads in the province. The Canadian stage of the day was a wonderful contrivance, a heavy lumbering box, slung on leather straps instead of springs, and often made without doors in order that, when fording bridgeless streams, the water might not flow in. With the window as the only means of exit, heavy-built passengers found it somewhat awkward when called upon, as they often were, to clamber out in order to ease the load uphill, or to wait while oxen from a neighbouring farm dragged the stage out of a mud-hole. The traveller who 'knew the ropes' provided himself with buffalo-skins for cushions; others went without. Arrived at Prescott, the passengers shifted to a river steamer, fitted more commodiously than the little boats used in the lower stretches, but still providing no sleeping quarters except in open bunks circling round the dining-saloon.

For thousands of the immigrants who were pouring into Upper Canada the fares of the river steamer were still prohibitive. Many came on bateaux, sometimes poled along as

of yore, sometimes taken in tow by a steam
Often more than a hundred immigrants, m
women, and children, would be crowded int
single thirty-foot bateau, 'huddled togethe
a traveller notes, 'as close as captives i
slave trader, exposed to the sun's rays by d
and the river damp by night, without p
tection.'[1] Still more used the Durham b
for the river journey. This famous craft w
a large, flat-bottomed barge, with round b
and square stern. With centre-board do
and mainsail and topsail set on its fixed ma
it made fair progress in the wider stretch
But on the up trip it was for the most p
poled or 'set' along. Each of the crew to
his stand at the bow end of one of the narr
gangways which ran along both sides of
boat, set firmly in the river bottom his lo
heavy, iron-shod pole, put his shoulder to
and, bending almost double, walked along
gangway to the stern and inch by inch for
the boat up-stream. 'The noise made by
clanking of the iron against the stones,
the poles were drawn up again toward
bow, could be heard for a long distance o
calm summer's day.' Finally, at Prescott
Kingston the Durham boat was exchanged

[1] Shirreff, *A Tour through North America*, p. 143.

the lower decks of the steamer, and the rest of the journey made with somewhat greater speed, if not much greater comfort.

The twenty years which followed 1830 saw the steamboat in its prime. The traveller going westward from Quebec in 1850 had a simple task before him: a change at Montreal was the only necessary break in a relatively comfortable and speedy journey. Two days now sufficed for the trip from Montreal to Toronto. In the United States, river boats had been evolved which far surpassed anything Europe had to offer in luxury and speed. Canadian business men were not far behind, and the St Lawrence lake and river route was well supplied with crack steamers, of the Royal Mail and rival lines, or with independent boats. The competition was at times intense, both in fares and in speed. Many Canadians of the day, absorbed in the local or personal rivalries of these boats, and impressed by their magnificence and reliability, were convinced that the last word in transportation had been said. Yet, on the lake and river, winter barred all through traffic. The main turnpike roads of the interior were greatly improved, but even on these long-distance traffic was expensive, and the by-

roads, especially in the spring and autum
were impassable except at a snail's pa
For traffic of town with town and provin
with province some means of transport l
dependent on time and tide was urgen
needed.

CHAPTER III

THE CALL FOR THE RAILWAY

'E have seen how in England a succession
workers almost apostolic in continuity had
ought the steam railway to practical suc-
ss, and how in Canada, before the railway
me, men were making shift with bateau
id steamer, with stage-coach and cart and
lèche, to carry themselves and their wares
meeting-place and market. Now we may
ance for a moment at the chief hope and
otive of those who brought the locomotive
ross the seas.

In all but the very earliest years of railway
lanning and building in Canada, two aims
ave been dominant. One has been political,
he desire to clamp together the settlements
attered across the continent, to fill the waste
paces and thus secure the physical basis for
ational unity and strength. The other has
een commercial, the desire to capture the
rade and traffic of an ever-expanding and

ever-receding west. Local convenience
local interests have played their part, bu
the larger strategy of railway building
dominant motives have been political
commercial. They have been blended
varying proportions; each has acted aga
the other as well as with it, but at all ti
they give the key to facts which other
remain a meaningless jumble of dates
figures.

The political motive is familiar and ne
only brief reference. That the present Can
is not a natural geographical unit is an
deniable fact. Each of the principal sect
has more natural connection with the co
sponding section of the United States t
with the other parts of Canada. And s
years ago it was doubtful whether any com
sentiment could take the place of the phy
unity which was lacking. There was, of co
no national consciousness, based on com
history and common aspirations. At best
link of the scattered colonies was tha
common loyalty to the British crown, an
worst a common inherited antagonism
the great republic to the south. Yet
seeing and courageous men were not con
to accept the decrees of geography or of

plomats who had been over-generous in nceding territory to American claims. They ught unity and understanding, out of fear aggression from their overshadowing neighurs and out of faintly shaping hope of what e northern half-continent might become.

For unity, knowledge and daily intercourse re needed; for knowledge and intercourse, eedy and cheap transportation was essential. ithin each province and between the two nadas much had been done, but neither er, canal, nor turnpike could serve to nihilate the vast distances that separated st from west and west from farthest west. nly the railway could achieve such a task.

But more was needed than patriotic sentient. All-red speeches might adorn a banuet or win an election, but facts—or fictions as to freight and dividends were needed beguile the capital from investors' pockets. he hope of securing for the Canadian pronces the trade and traffic of the golden est was, in early years as in late, much the rongest factor in railway policy.

When the white man came to North merica, he found himself hemmed in to the tlantic coast by the long range of the ppalachians. These mountains, though not

lofty, were rugged and covered with de
forests and tangled undergrowth. There w
few doorways to the great open spaces
yond. On the far north the southward
trusion of the ocean, known as Hudson B
opened a precarious way, important in
early days of the white man's period, possi
to become important again in our own,
negligible during the intervening years. Fr
the south, entrance could be had by
Mississippi and its tributaries, offering
most of the year ten thousand miles of nav
able waters. In the east the St Lawre
system, stretching three thousand miles we
ward from the sea, and the Hudson a
Mohawk rivers, passing through a gap in
Alleghanies, offered still more conveni
access.

Early and late in the history of the wh
man's America the land and the trade of
interior have been the prize sought by ri
nations and rival cities, and the possession
a speedy and convenient route has been
means of securing the prize. The later w
fare was less spectacular than the old, but
less keen. The navvy took the place of
Indian, pick and shovel and theodolite
place of bow and musket, and a lower frei

a cent on a bushel of wheat became the nmunition in place of the former glass beads fire-water. But seventeenth- or eighenth-century Englishmen and Frenchmen on udson Bay, Spaniards and Frenchmen on the ississippi, Frenchmen and Englishmen on the Lawrence, Dutchmen and Englishmen on e Hudson, did not strive more eagerly for ntrol than the Montreal and Halifax, Portnd and Boston and New York, Philadelphia nd Baltimore and New Orleans of the nineenth century. The struggle became especily intense when the advancing flood of ttlers cut their way through the Appalachian oods and burst into the prairies of the ississippi valley. There was no longer a tenear struggle to clear a space of forty or fifty cres; at once the soil was ready for the lough. For a few years the grain of the alley states was needed for their own inushing settlers, but a surplus grew rapidly nd had to find an outlet in the east or in urope. The miraculous speed of western ettlement and the magnitude of the prize at take soon centred public interest on the uestion of the route which was to provide his outlet.

The Mississippi route was the first to be

developed. In canoe and pirogue, batea flatboat, and ark, settlers went up and produ came down. But the winding stream, t shifting channel, the swift current, the f quent snag and sand-bar made navigati down-stream dangerous and navigation u stream incredibly slow: the heavier vess took three months for the trip from N Orleans to Louisville. With the coming the steamboat a strong impetus was giv alike to settlement and to export trade. the forties New Orleans ranked the fourth p in the world and the Mississippi valley e ceeded the British Isles in the ownership ships' tonnage. In 1850 the Mississippi s carried to the sea cargoes twice the value those that sought the Lakes and the E Canal, though in the import trade these p portions were reversed. At this time a l drawn east and west through the centre Ohio marked the commercial watershed. N until after the Civil War did the glories of t Mississippi pass away.

Next, New York devised its master-stro the Erie Canal. Gouverneur Morris and Witt Clinton saw the opportunity which t Mohawk-Hudson cleft in the Appalachi barrier offered, and the state rose to

igging was begun in 1817, and in 1825 the st barge passed from Lake Erie to the udson. At first the canal was only a four- ot ditch, but it proved the greatest single ctor in the development of the region south the Lakes. Prosperous cities—Buffalo, ockport, Rochester, Syracuse, Utica, Sche- ctady—sprang up all along the route. Cost transport from Buffalo to New York was t in four. The success of New York led nnsylvania to build canals through the state Pittsburg, with a portage railroad over the leghanies, while in the west canals were dug connect Lake Erie with the Ohio, and Lake ichigan with the Illinois and the Mississippi. To the Canadian of that day the West meant pper Canada or Canada West, and 'the far est' meant Illinois and Indiana. The Sas- tchewan was to him little more than the ang-tse-Kiang. But although the far west as not under his own flag, it dominated his oughts as greatly as the North-West has minated our thoughts half a century later. nada sought its share of the western trade. he Canadian provinces were thinly peopled, eir revenues were scanty and their credit w, but the example of New York stirred em to the effort to remove the barriers to

navigation in the St Lawrence, and to of
their magnificent lake and river ship-rou
against the petty barge canal which was ca
turing the western trade. The Welland Ca
was built to carry east-bound traffic beyond t
point where Buffalo tapped it, and by 18
as we have seen, canals were completed on t
St Lawrence, providing a nine-foot waterw
from Chicago to Montreal.

It was a magnificent effort for a str
gling colony. But it was scarcely finished
the pæans of self-congratulation on the
expected discovery of an enterprise qu
Yankee in its daring were still echoing
when it was found to have been made larg
in vain. So far from monopolizing the tr
of the western states, the St Lawrence ro
was not even keeping the east-bound tra
of Upper Canada itself. The reasons w
soon plain. The repeal in 1846 of the C
Laws and in 1848 of the differential duties
favour of the St Lawrence route were te
porary blows. The granting of bonding pri
leges by the United States in 1845 drew tra
from Canada to southern routes. Ocean ra
were cheaper from New York than fr
Montreal; in 1850, for example, the frei
on a barrel of flour from New York to

iverpool was 1s. 3½d., while from Montal it was 3s. 0½d. This was because the ajority of the vessels arriving at Montreal me in ballast, and also because on the outard voyage the offerings of timber made tes high. Timber enjoyed a preference in e British market, and, as has happened nce, this preference was simply absorbed by e vessel owner. But most important of l, in the United States the railway, with its eedy, all-year service, had already taken e place of the canal. The Canadian ports ere fighting with weapons obsolete before mpleted.

CHAPTER IV

THE CANADIAN BEGINNINGS

FROM the beginning in Canada, to a mu
greater degree than in Great Britain or
the United States, the railway was design
to serve through traffic. But it was regard
at first as only a very minor link in the cha
River and canal were still considered
great highways of through traffic. Only wh
there were gaps to be bridged between
more important waterways was the railw
at first thought profitable. In the phrase
one of the most distinguished of Canad
engineers, Thomas C. Keefer, the early ro
were portage roads.

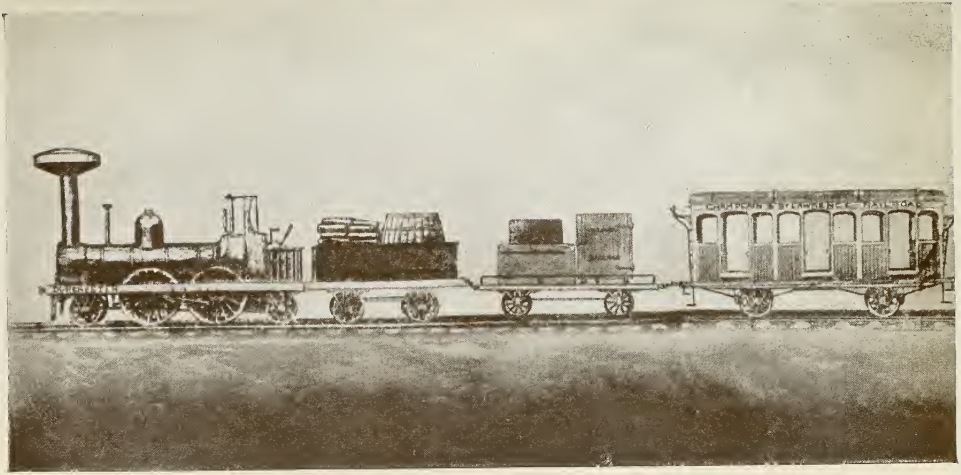
In 1832, two years after the completion
the Liverpool and Manchester Railway
charter was granted by the legislature
Lower Canada to the Company of the Pro-
prietors of the Champlain and St Lawre
Railroad, for a line from Laprairie on the St
Lawrence to St Johns, sixteen miles dist

n the Richelieu river, just above the rapids. rom St Johns transportation to New York as easily effected, through the Richelieu to ake Champlain and thence to the Hudson. his portage road promised to shorten materi- lly the journey from Montreal to New York. Construction was begun in 1835, and the oad opened for traffic in July 1836. The ails were of wood, with thin flat bars of iron oiked on. These were apt to curl up on the ast provocation, whence came their popular ame of 'snake-rails.' At first horse power as used, but in 1837 the proprietors imported n engine and an engineer from England. ome premonition of trouble made the man- gement decide to make the trial run by oonlight. In spite of all the efforts of ngineer and officials, the *Kitten* would not udge an inch. Finally an engineer, bor- owed from the Baltimore and Ohio Railroad, eported that all that was needed was 'more ood and water,' and given these the *Kitten* ambolled along at twenty miles an hour.

The Champlain and St Lawrence was at rst operated only in the summer, when its ervices as a portage route were most needed. fter a decade of moderately successful work- ng, it was decided, significantly, to lengthen

the rail and shorten the water section of th route. By 1852 the rails had been extende northward to St Lambert, opposite Montrea and southward to Rouse's Point, on La Champlain. Twenty years later this pione road, after a period of leasing, was complete absorbed by the Grand Trunk Railway.

For ten years the sixteen-mile Champla and St Lawrence was the sole steam railw in British North America, while by 1846 t United Kingdom had built over twenty-eig hundred miles, and the United States near five thousand. Political unrest, commerc depression, absorption of public funds canals, hindered development in Canad Many projects were formed and charte secured—for roads in the western peninsu of Upper Canada, between Cobourg and Re Lake, on the Upper Ottawa, in the Easte Townships, and elsewhere—but they all ca to nothing. It was not until the railw mania broke out in England in the mid forties—when 'King' Hudson, first of t great promoters and speculators, turned l to gold; when ninety schemes were floate in a single week, calling for eighty milli pounds; when companies capitalized at o seven hundred millions scrambled for chart



THE FIRST RAILWAY ENGINE IN CANADA

CHAMPLAIN AND ST LAWRENCE RAILROAD, 1837

From a print in the Château de Ramezay

nd all England fought for their shares—that anadian promoters found interest awakened nd capitalists keen to listen. At the same ime, the active competition of United States oads for the western traffic and the approach- ng completion of the St Lawrence canal ystem prompted further steps. A second tage in Canadian railway building had begun.

First may be noted three small lines, which ere in their beginnings chiefly portage roads f the most limited type. The Montreal and achine, begun in 1846 and completed in 847, was the second complete road built. ts track of eight miles took the place of the arlier stage route round the Lachine rapids. ive years later an extension, the Lake St ouis and Province Line, was built from aughnawaga, on the opposite shore of the t Lawrence, to the boundary and beyond o Mooer's Junction, where it made connec- ion with American roads, and thus offered route from Montreal to New York rivalling he older Champlain and St Lawrence route. A steam ferry, which could carry a locomo- ive and three loaded cars, was used for rossing from Lachine to Caughnawaga. The nlarged line, known as the Montreal and New York Railroad, did not prosper, and was

eventually absorbed by its rival, the Cham
plain and St Lawrence. The third com
pleted road, the St Lawrence and Industr
Village, was also built in Lower Canad
running from Lanoraie on the north bank
the St Lawrence twelve miles to the villag
of Industry, later Joliette. It was opene
for traffic in 1850, and was a road for use
summer only. Meanwhile, the desirability
building a road to circumvent Niagara ha
not escaped attention. In 1835 the Erie an
Ontario Railroad was chartered, and in 183
the line was opened from Queenston to Chi
pawa. The grades near Queenston we
too steep for the locomotives of the day, an
the road was operated by horses; even so,
halted a hundred feet above the level of t
river, and failed to make good its promi
as an effective portage route. In 1852 t
charter was amended, and two years later t
road was rebuilt from Chippawa to Niagar
on-the-Lake, and operated by steam. It w
later extended to Fort Erie and absorbed
the Canada Southern.

More ambitious schemes were under w
—the planning of the St Lawrence a
Atlantic in Canada East, and of the Gre
Western and later the Northern in Cana

Vest. These roads were all designed to ecure for Canadian routes and Canadian ports share of the through traffic of the West. hey were all links in longer chains; the me of independent through roads had not et come. The St Lawrence and Atlantic as built to secure the supremacy of the pper St Lawrence route by giving Montreal winter outlet at Portland. The Northern, unning from Lake Ontario at Toronto to eorgian Bay at Collingwood, was a magnified ortage road, shortening by hundreds of iles the distance from Chicago and the upper kes to the St Lawrence ports. The Great Vestern, connecting Buffalo and Detroit, was he central link in the shortest route between lew York and Chicago. Not only were these oads important in themselves, but the ex- erience acquired in the endeavour to finance nd construct them largely determined the olicy of the great era of railway construc- ion which began with the chartering of the rand Trunk.

The St Lawrence and Atlantic was the anadian half of the first international rail- ay ever built. At the outset much more han half of the enterprise and activity was entred in the United States, for the Canadas

were still apprentices in railway promotio and construction. The ambition of an Amer can seaport prompted the planning of the lin the untiring energy of an American promot made it possible, and American contracto built the greater part.

The little city of Portland possessed th most northerly harbour on the Atlantic coa of the United States. Mr John A. Poo whose lifetime was devoted to the extensio of railways in northern New England, dream of making it, by a road to Montreal, the outl of the trade of the West, at least so far freight traffic went. Passengers and mai he conceived, could best be carried to Euro from Halifax, nearly six hundred miles near than New York to Liverpool, but the railw connecting Halifax with the large Americ cities should pass through Portland, and th make it an important divisional point, if n a terminus. His enthusiasm fired his fello citizens: the city subscribed for stock in t proposed road to Montreal, and guarante bonds, while private subscriptions mount still higher, at least on paper. More di- culty was experienced in inducing allies Montreal to undertake the Canadian half the road. Before 1845, however, Montr

usiness men were convinced that a railway Portland or Boston offered them the best eans of recovering from the blow inflicted the repeal of the British preference on anadian wheat and flour. If Montreal could ot be the New York of Canada, it might at ast occupy the position which Buffalo was ow achieving, gathering all the trade of the terior to forward it in summer and especially winter over the new road. The advantage such a line in the development of the astern Townships was also evident.

The only question in dispute in Canada was to the relative merits of the Boston and the ortland route. The superior energy of the ortland promoters weighed down the scale favour of their city. In February 1845 oor struggled five days through a north-ast blizzard, and reached Montreal just in me to turn the vote of the Board of Trade gainst Boston. He organized a spectacular ace of express sleighs to disprove the claim hat, though the British packet called at ortland before going on to Boston, the oute by Boston would prove speedier. Re-ays of teams were provided all along the ival roads from Boston and from Portland, ve to fifteen miles apart; evergreen bushes

were set up in the snow to mark the road
part of the Montreal mail was taken off a
Portland, and part at Boston, and dispatche
by the rival couriers. The Portland rela
covered the distance, nearly three hundre
miles, in twenty hours, and dashed int
Montreal, with all colours flying, twelve hou
ahead of the Boston contingent. The chee
that greeted the victors marked the defini
turn of popular favour toward the Portlan
route. Two allied companies were inco
porated—the Atlantic and St Lawrence
build the United States section of the railwa
and the St Lawrence and Atlantic to bui
from Montreal to the border.

The St Lawrence and Atlantic was a val
able medium of experience, if not of traffi
In its management were found the leadi
business men of Montreal, such as Moffa
M'Gill, Molson, Stayner, and Torrance.
first all was fair. Subscriptions came in free
from Montreal and the Eastern Townshi
One of the youngest of the directors, Ale
ander T. Galt, then commissioner of the Britis
American Land Company, succeeded in floati
a large quantity of stock in England—the fi
of countless railway appeals to the Lond
market—only to have the subscriptions wit

rawn in 1846 when the Hudson bubble burst. he Canadian stockholders put up what money ney could. The city of Montreal took 125,000 stock. The British-American Land ompany and the Montreal Seminary each lent 25,000. Country subscribers were permitted) make payments in pork or eggs for the se of the construction gang, though one irector resigned because not allowed to turn his farm. The contractors, Black, Wood nd Company, as was customary in the nited States at the time, took a large portion f their payment in stock. Still, funds were cking. Internal difficulties developed; direc-)rs did not direct; and in 1849 the finances ere found to be in a hopelessly tangled ate. Galt then took charge as president, ith John Young—forwarder and born pro- noter, active in all transportation schemes, hether for canal, railway, or bridge—as ice-president. Under their skilful financing he work went on, but scarcely forty miles ould be opened in 1849. To complete the oad to the border, in the depression which revailed, seemed utterly beyond the unaided esources of private capitalists, and the direc-)rs turned to the government for aid.

Meanwhile, Upper Canada lagged in action,

although schemes were many. Omittin merely local projects, the roads most in th public eye were those leading west and nort from Lake Ontario. The Great Western pro ject had been longest under way, and showe a significant evolution. In 1834 the legi lature of Upper Canada had granted a charte to the London and Gore Railroad Compan This road was designed to carry the produc of the rich western peninsula to the borderin lakes, and chiefly to Lake Ontario. The ma line was to run in the direction of Govern Simcoe's great highway, Dundas Street, fro Burlington Bay to London, while power w taken to extend the road to Lake Huron an the navigable waters of the Thames. Nothin was done under this charter. When it w renewed by an Act of 1845, the name w changed to the Great Western, and, mo important, the route was altered to exten from the Niagara river via Hamilton Windsor and Sarnia. For meanwhile th New York Central had reached Buffalo, an the Michigan Central was being pushed wes ward from Detroit toward Chicago. A ro through Canada would provide a shorter lin than one south of Lake Erie, and the Gre Western was designed to fill this gap.

With all the possibilities of through and cal traffic, and of comparatively good ades and few curves, the road was long in arting. An eminent American engineer, harles B. Stuart, reported glowingly on the ospects. Two citizens of Hamilton, Allan acNab, fiery politician and calculating lobby- t, and Isaac Buchanan, untiring advocate of ilways, protection, and paper money, threw emselves into the campaign. Samuel Zim- ermann, the best known contractor of the eriod, a Pennsylvanian who had come to anada to take a Welland Canal contract, nd stayed to be the power behind the scenes the provincial legislature, was prepared to uild the road. Hudson gave the scheme his pproval. All to no immediate purpose. The ontracts were let, ground was broken at ondon in 1843, but the money to build was ot forthcoming. In consequence the Great Vestern also turned to parliament for aid.

The Toronto, Simcoe and Huron Union Rail- oad Company—later known as the Northern —the first road in Upper Canada on which team locomotives were used, was still slower n emerging from the promotion stage. The dea of building a great portage road between Lake Huron and Lake Ontario was an obvious

one, and proposals for its construction we frequent. It was not until the scheme w taken up by Frederick Chase Capreol, a sa guine and ingenious Englishman many yea resident in Toronto, that any real progre was made. Capreol conceived the brillia idea of combining the lure of a lottery and t increment of land values to finance a road fro Toronto to Georgian Bay. His proposal w to raise funds by a lottery for the purchase 100,000 acres of land along the route of t railroad, and to pay for the road out of t increase in the value of the land. Objectio moral and financial were urged, and Capre modified his scheme. In 1849 an Act w passed granting a charter and permitting t raising of money either by subscription or lottery, but it was reserved by the governo general for royal assent, on account of t lottery clause. Capreol, nothing daunte sailed for England, and in seven weeks w back with royal assent assured. The lotter for all its alluring promises, fell flat. Th the Northern, too, clamoured for public aid.

With these local roads under way actively promoted, still larger projects loom up. A line from Montreal to Toronto, para leling the St Lawrence, and thus for the fi

>ronto, Simcoe and Huron

LROAD UNION COMPANY!

UNION OF INTERESTS!

PITAL:—$2,000,000!!

AN EXTENSIVE CANADIAN

LROAD UNION TIRAGE!

upon the principle of the Art Unions of England;
authorised by an Act of the Provincial Parliament;
., Cap. 199, and sanctioned by the Royal Assent of
esty in Privy Council, July 30th, 1849,—containing
00 in stock, in various allotments of

000 !—$40,000 !—$20,000—$10,000 !
$5,000—$2,000—1,000—&c.

roceeds to be applied to construct a Railroad from
TO to LAKE HURON, touching at Holland Land-
Barrie. To be PUBLICLY DRAWN at the City
oronto, under the superintendence of Directors,
authorised by the Act of Incorporation, consisting
llowing Gentlemen, viz:

APREOL,	CHARLES BERCZY,
J. BOULTON, M.P.P.	JOSEPH D. RIDOUT,
IBBERT,	GEORGE BARROW,
T EASTON BURNS,	ALBERT FURNISS.
MORRISON, M. P. P.	B. HOLMES, M. P. P.

BANKERS:

mmercial Bank, M. D., Toronto, and its Various Branches in Canada.

Number to be drawn, and each number ave its fate decided in accordance with an directed by the Act of Incorporation.

irteen days Public Notice to be given previous to day of drawing.

. CAPREOL, MANAGER,
POINTED BY THE BOARD OF DIRECTORS.

GRAND PLAN:

2 magnificent allotments of	$100,000	in Stock,	$200,000
6 splendid allotments of	40,000	"	240,000
10 extensive allotments of	20,000	"	200,000
16 large allotments of	10,000	"	160,000
20 allotments of	5,000	"	100,000
50 allotments of	2,000	"	100,000
100 allotments of	1,000	"	100,000
250 allotments of	500	"	125,000
500 allotments of	250	"	125,000
2500 allotments of	100	"	250,000
5000 allotments of	50	"	250,000
7500 allotments of	20	"	150,000
15,954 allotments, amounting to			**$2,000,000**
100,000 Contributions amount to			**$2,000,000**

Being little more than Five Blanks to an Allotment!!!

Contributions $20 each; Halves & Quarters in Proportion.

☞ SCRIP will be issued for allotments, within forty days after the drawing, on payment of twelve per cent, thereon, in compliance with the provisions of the Act of Incorporation.

This Grand and Important Plan is particularly deserving of attention from every class of the community in Canada and various parts of the United States, whether directly interested in Railroads or not. It has been projected as a great public advantage, that of opening a Railway communication across the Peninsula to the Far West, in connection with the lines now finished from New York and Boston to Oswego—thus rendering the Northern Route, by Toronto to the Western States, shorter than any other by several hundred miles—the distance across the Peninsula being only about Eighty Miles, thus avoiding the circuitous and dangerous route by Lake Erie and the Southern shore of Lake Huron.

It is presumed that when this line of Railway is finished, it will be the best paying Stock in North America.

☞ Applicatons for Tickets (enclosing remittances) to be addressed, post-paid, to

F. C. CAPREOL, *Manager.*

UNION TIRAGE HALL, TORONTO, 1st *January*, 1850. 495-1

RAILROADS AND LOTTERIES

An Early Canadian Prospectus

ne competing with water transport instead merely supplementing it, began to be talked as possible. The need of bringing the aritime Provinces into closer touch with the nadas lent support to plans of a road from alifax to Quebec. But for these extensive nemes public aid was even more indispens-le.

Hitherto the government of British North nerica had framed no definite or continuous ilway policy. There had been general agree-ent that railway building should be left to ivate enterprise. In 1832, when the charter the Champlain and St Lawrence was under scussion in the legislature of Lower Canada, me members advocated government owner-ip, but Papineau, the French-Canadian ader, protested against the jobbery that uld follow. In the forties the government Canada was selling its highways to toll-mpanies, and was not likely to embark on ilway construction. In several later charters ovision was made for state purchase, after erm of years, at cost plus twenty or twenty-e per cent. Control of private companies the interest of the shipper was sometimes ught. In the charter of the Champlain and Lawrence a maximum rate was prescribed

at 3d. a mile for passengers and 9¾d. a mile p
ton of freight, subject to reduction wh
profits exceeded twelve per cent. In Upp
Canada the earlier charters set no maximu
though the governor in council was giv
power to approve rates. It appeared to
held that different forwarding compan
would make use of the iron way, and aff
sufficient competition to protect shippers a
passengers against extortion. New Brunsw
in 1836 revealed the not modest expectati
of profit which prevailed. It provided, in
St Andrews and Quebec charter, that a
ten years tolls, if excessive, might be redu
to yield only twenty-five per cent profit.
same sanguine expectations were reflected
the provision made in eight charters issued
Lower Canada between 1845 and 1850, t
half the profits over a minimum varying f
ten to twenty-four per cent were to go to
state.

The prevalent belief in the great profit
be obtained influenced public opinion aga
any grant of government aid, except duri
brief period before the Rebellion of 1837, w
the lavish policy of state construction
state bonuses adopted by the neighbou
republic proved contagious in Upper Can

nder the influence of that example the bourg Railroad was to be granted a loan £10,000 as soon as an equal sum was ivately subscribed and one-third was paid . The Toronto and Lake Huron was omised £3 for every £1 of private capital pended, up to £100,000, while the London d Gore was offered a loan of twice that m; in both these cases the loan was to be cured not only by a lien on the road, but by e liability of the communities benefited to special tax. None of these generous offers as taken up, and they were not renewed. it a growing realization of the importance railways and of the evident difficulty of ilding them in Canada solely by private nds compelled the formation of a new policy state assistance. This new policy ushered the first great period of railway construction.

CHAPTER V

THE GRAND TRUNK ERA

It has been seen that by the close of t
forties British North America was realizi
both the need of railway expansion and t
difficulty of financing it. Other factors co
bined to bring about the intervention of
state on a large scale. Both in the Canad
and in the Maritime Provinces political c
putes were giving place to economic activit
The battle of responsible government had b
fought and won. Men's energies were
longer absorbed by constitutional strife. Ba
win and LaFontaine were making way
Hincks and Morin; Howe had turned to c
structive tasks. Responsibility was bring
new confidence and new initiative, tho
colonial dependence still continued to ham
enterprise. British and American contrac
discovered the virgin field awaiting them,
local politicians discovered the cash valu
votes and influence. The example set in
United States was powerful. Massachus

d guaranteed bonds of local roads to the tent of eight millions, without ever having pay a cent of the interest; and though New ork's experience had been more chequered, e successes were stressed and the failures re plausibly explained away.

The eight or ten years which followed 1849 e notable not only for a sudden outburst of lway construction and speculative activity roughout the provinces, but for the beginng of that close connection between politics d railways which is distinctively Canadian. this era parliament became the field of ilway debate. Political motives came to e front: 'statesmen' began to talk of links Empire and 'politicians' began to press e claims of their constituencies for needed ilway communications. Cabinets realized e value of the charters they could grant the country's credit they could pledge, and ntractors swarmed to the feast. 'Railways e my politics,' was the frank avowal of the nservative leader, Sir Allan MacNab.

Three names are closely linked with this w policy—those of Howe in Nova Scotia, handler in New Brunswick, and Hincks in nada.

Francis Hincks, merchant, journalist, and

politician, moderate reformer, and Canada first notable finance minister, took the initia tive. As inspector-general in the secon Baldwin-LaFontaine Cabinet, he brought dow the first instalment of his railway policy 1849. In the previous session a committ of the House had considered the demand the Great Western and of the St Lawrence a Atlantic for assistance, and had discussed t less advanced proposals for railways fro Montreal to Toronto and from Quebec Halifax. Allan MacNab, as chairman of t committee, had listened sympathetically the plea of Allan MacNab, president of t Great Western, and the committee had r ported in favour of guaranteeing the stock the two companies to the extent of a milli sterling. No action was taken at this sessio Meanwhile Hincks, by instruction of colleagues, had drawn up two memoranda one suggesting that the crown lands in t province might be offered as security for t capital necessary to build the road with the province, and the other urging the I perial government to undertake the road fr Halifax to Quebec. Capitalists gave no e couragement to the first suggestion, and t British government had not replied to t

cond by the end of the session of 1848-49. cordingly, in April 1849 Hincks brought wn a new policy, based upon a suggestion of e directors of the St Lawrence and Atlantic. ie proposal was, to guarantee the interest, t exceeding six per cent, on half the bonds any railway over seventy-five miles long, henever half the road had been constructed, e province to be protected by a first charge ter the bondholders' lien. MacNab seconded e resolution; voices from Bytown and the guenay mildly questioned the policy, but e resolution passed unanimously.

Even with this aid construction did not oceed apace. It was still necessary for the mpanies to complete half the road before ualifying for government assistance. This ie St Lawrence road effected slowly, in face quarrels with contractors, repudiation of lls by shareholders, and hesitancy of banks make advances. The Great Western did ot get under way until 1851, when American pitalists, connected with the New York entral, took shares and a place on the irectorate. In the same year the Toronto, imcoe and Huron, later known as the orthern, began construction.

Meanwhile suggestions from the Maritime

Provinces had brought still more ambitiou schemes within practical range, and thes led Hincks to take the second step in h policy of aid to railways.

In the Maritime Provinces, from 1835 t 1850, many railways had been projected, bu with the exception of a small coal tramwa in Nova Scotia, built in 1839 from the Albio coal-mines to tide-water, not a mile was bui before 1847. There, as elsewhere, the pampl leteer and the promoter acted as pioneer and the capitalist and the politician took u their projects later. The plans which chief appealed to public attention looked to th linking up of St Andrews, St John, and Ha fax with Quebec and Montreal and with th railways of Maine. From the outset th projects in these provinces were much mo ambitious than the local beginnings in th Canadas. They were more markedly politic and military in aim, and in consequen depended in greater measure upon the aid the British government. When at last co struction was begun, the policy of provinc ownership was more widely adopted.

When in 1876 Sandford Fleming drew up record of the great work just completed und his direction, the Intercolonial Railway,

illed attention to the first proposal for such road, found in an article contributed to the *nited Service Journal* in 1832 by Henry airbairn.[1] The author proposed the two ief projects which for half a century were engross the attention of the Maritime rovinces: a road from St Andrews to Quebec, hich should 'convey the whole trade of the Lawrence, in a single day, to Atlantic aters,' and another line from Halifax through John to the border of Maine, which should mmand for Halifax 'the whole stream of assengers, mails, and light articles of com- erce passing into the British possessions and the United States and every part of the ntinent of America.'

St Andrews was the winter port in British rritory nearest to the upper provinces. If ie territory in dispute on the Maine boundary ll to New Brunswick and Quebec, a road ot more than 250 or 300 miles long could be uilt from this port to the city of Quebec. n 1835 a Railway Association was formed in t Andrews, an exploratory survey was made, nd the interest of Lower Canada was enlisted.

[1] As a matter of fact, discussion of this scheme began in t Andrews in 1827, and in 1828 John Wilson convened a meeting the citizens to further it.

In the following year New Brunswick gave charter to the St Andrews and Quebec Rai road, and the Imperial government agree to bear the cost of a survey. But the surve was speedily halted because of protests fro Maine; in 1842 the Ashburton Treaty assigne to the United States a great part of th territory through which the line was pro jected, and the promoters gave up. Then i 1845 the railway mania in England brough a revival of all colonial schemes. Sir Richar Broun took up the plan for a line from Halifa to Quebec, along with other grandiose pr jects connected with his endeavour to revi the lost glories of the baronetage of Nov Scotia, but did not get past the stage of forn ing a provisional committee. This discussio revived the flagging hopes of St Andrews, an as will be seen in detail later, a beginning w made by a railway from St Andrews to Woo stock, the New Brunswick and Canada, f which ground was broken in November 184

The provincial legislature early conclud that it would be impossible to induce priva capitalists to build an intercolonial road u aided. They were unanimous also, not y having emerged from the stage of colon dependence, in desiring to throw the burd

such aid as far as possible on the British vernment. In the absence of a colonial deration the United Kingdom was the main nnecting-link between the colonies in British orth America, and was presumably most terested in matters affecting more than a ngle colony. The British government, how-er, had by this time about decided that the d policy of treating the colonies as an estate plantation of the mother country, protecting developing them in return for the monopoly their trade, did not pay. It had reluctantly nceded them political home rule; it was on to thrust upon them freedom of trade; nd it was not inclined to retain burdens hen it had given up privileges. Mr Glad-one, secretary for the Colonies, agreed, how-ver, in 1846, to have a survey made at the xpense of the three colonies concerned.

This survey, the starting-point for the con-oversies and the proposals of a generation, as completed in 1848, under Major Robin-on and Lieutenant Henderson of the Royal ngineers. 'Major Robinson's Line,' as it ame to be known, ran roughly in the direction ventually followed by the Intercolonial—om Halifax to Truro, and thence north to liramichi and the Chaleur Bay, and up the

Metapedia valley to the St Lawrence. Th distance from Halifax to Quebec was computed at 635 miles, and the cost at £7000 sterling a mile or about £5,000,000. Acting on th assurance of engineers that the route wa feasible, each of the three colonial govern ments offered in 1849 to set aside for th work a belt of crown lands ten miles wide o each side of the railway, and to pledge £20,00 a year to meet interest or expenses, if th British government would undertake the pro ject. Downing Street, however, replied politel but emphatically that no aid could be given.

After the plan of a northern route to Quebe was thus apparently given its quietus, interes shifted to the Portland connections. Th building of the road from Montreal to Portlan added further strength to the claims of th route. On paper, at least, it seemed possib to make the connection between Montre and Halifax by following either the northe or the southern sides of the great squar One of the southern sides was now under wa and by building the other, from Portland St John and Halifax, connection with t Canadas would be completed. Under t leadership once more of John A. Poor, Po land took up the latter project. The name

ıe proposed road, the European and North merican, showed the influence of the same ope which Fairbairn had expressed—that ıe road from Portland to Halifax would be- me the channel of communication between ıe United States and Europe, at least for assengers, mails, and express traffic. With a ne of steamers from Halifax to Galway in eland, it was held that the journey from ew York to London could be cut to six or ven days.

In July 1850 a great convention assembled ı Portland, attended by delegates from New runswick and Nova Scotia as well as from laine and other New England states. Inter- wined flags and fraternal unity, local develop- ıent and highways to Europe, prospective rofits and ways and means of construction, ere the themes of the fervent orators and romoters. The convention was enthusias- ically in favour of the project. The 550 iles from Portland to Halifax—222 in laine, 204 in New Brunswick, and 124 in ova Scotia—would cost, it was estimated, 12,000,000, half of which might be raised by rivate subscription and the rest by state and rovincial guarantee.

The delegates from the Maritime Provinces

returned home full of enthusiasm, but in creasingly uncertain about the securing the necessary capital. At this stage Joseph Howe came to the front. He had muc earlier, in 1835, before entering parliamen taken the lead in advocating a local railwa from Halifax to Windsor, but had not bee prominent in recent discussions. He no urged strongly that the province of Nov Scotia should itself construct the section the European and North American which la within its borders. He proposed further seek from the Imperial government a guara tee of the necessary loan, in order that th province might borrow on lower terms. Th Colonial Office, while expressing its approv of the Portland scheme, declined to give guarantee any more than a cash contributio Nothing daunted, Howe sailed for Englan in November 1850, and by persistent inte views, eloquent public addresses and exhau tive pamphlets, caught public favour, and spite of Cabinet changes in London secur the pledge he desired.

In the official reply of the Colonial Offi Howe was informed that aid would not given except for an object of importance the Empire as a whole, and that according

d was contingent upon securing help from ew Brunswick and Canada to build the whole oad from Halifax to Quebec. Major Robin- on's line need not be followed if a shorter nd better could be secured; any change, owever, should be subject to the approval f the British government. 'The British overnment would by no means object to s forming part of the plan that it should nclude provision for establishing a com- unication between the projected railway and he railways of the United States.' The olonies were to bear the whole cost of the oan, and were to impose taxes sufficient to rovide interest and sinking fund, and thus nsure against any risk of loss to the United Kingdom.

Howe returned triumphant. The British overnment would guarantee a loan of 7,000,000, which would build the roads to Portland and to Quebec and perhaps still arther west. He hastened to New Bruns- vick, and won the consent of its government o the larger plan, went on to Portland and llayed its murmurs, and with E. B. Chandler f New Brunswick reached Toronto, then the eat of government of the province of Canada, n June 1851. His eloquence and the dazzling

offer of cheap and seemingly unlimited capit soon won consent. The representatives of t three provinces agreed to construct the ro from Halifax to Quebec on joint accou while Canada would build the extension fro Quebec to Montreal, and New Brunswick t extension to the Maine border, each at i own risk, but in all cases out of the £7,000,0 guaranteed loan.

Then suddenly the bubble burst. T Colonial Office, late in 1851, declared th Howe had been mistaken in declaring that t guarantee was to extend to the European a North American project. The British gover ment had no objection to this road being bui but would not aid it. The officials of t Colonial Office declared that they never mea to promise anything else.

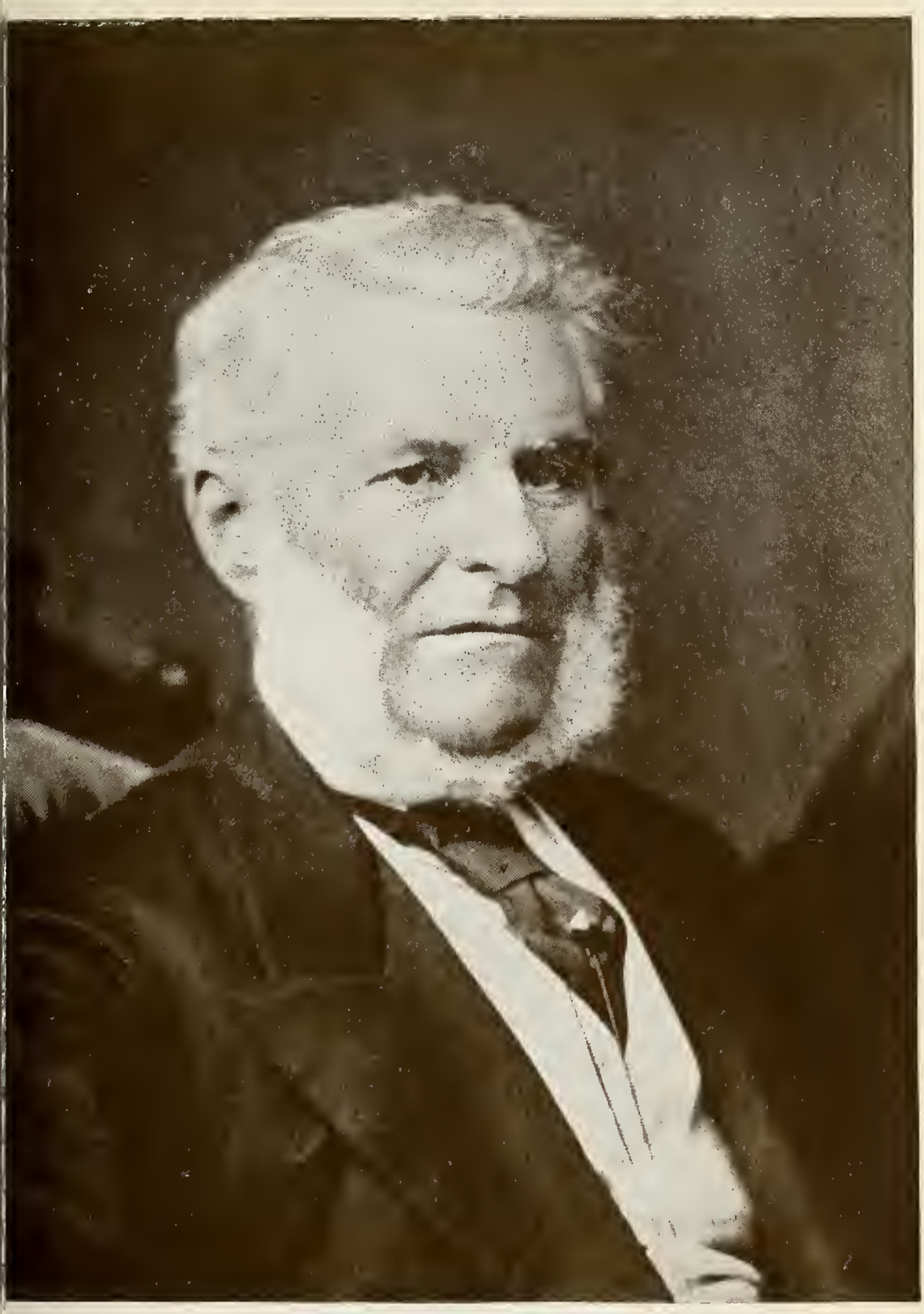
It is difficult to assign with certai responsibility for this serious misunderstan ing. Possibly Howe's optimism and oratori vagueness led him to misinterpret the p mises made, but his reports immediately af the interviews were explicit, and in d patches and speeches sent to the Colon Office and acknowledged with high comp ments, his version of the agreement had be set forth clearly and for months had go

challenged. He cannot be freed from a
are of the blame, but the negligence of
wning Street was at least equally the source
the misunderstanding.

The whole plan thus fell to the ground. The
nsent of the three provinces was essential,
d New Brunswick would not support the
lifax and Quebec project if the Portland
d, running through the most populous and
luential sections of the province, was to be
stponed indefinitely. Hincks determined
endeavour to save the situation. Accom-
nied by John Young and E. P. Taché, he
ited Fredericton and Halifax early in 1852,
d hammered out a compromise. New
unswick agreed to join in the Halifax to
ebec project on condition that the road
uld run from Halifax to St John and thence
the valley of the St John river; Nova
otia agreed to this change, which made St
hn rather than Halifax the main ocean
minus, on condition that New Brunswick
uld bear five-twelfths as against its own
ee-twelfths of the cost. It remained to
ure the consent of the Imperial government
this change in route, and accordingly
ncks, Chandler, and Howe arranged to sail
England early in March. Hincks sailed

on the day agreed ; Chandler followed a fo
night later ; Howe, repenting of his barga
postponed sailing a fortnight, a month,
weeks, and then announced that because
election pressure he could not go at all. Hinc
and Chandler found in office in London a n
government which appeared biased agai
the valley route. Upon a peremptory requ
from Hincks for a definite answer within
fortnight, the British Cabinet, in spite of
previous promise to consider the route
open question, declined to aid any but a r
following Major Robinson's line. The ne
tiations broke off, joint action between
provinces failed, and each province switc
to its own separate track.

Howe steadily maintained the policy
state ownership, but had unusual difficulty
carrying Nova Scotia with him. The g
English contracting firm of Peto, Bras
Betts and Jackson, whose operations in
other provinces will be discussed at gre
length, offered to find the necessary capit
given the contracts on their own terms. M
Nova Scotians were dazzled by the promise
the agents of this firm, and Howe in 1853
forced to agree to their proposals. The
tractors found themselves unable to m



SIR FRANCIS HINCKS

From a portrait in the Dominion Archives

od their promises, in face of panics on the ock market in England, and in the following ar Howe's original policy was sanctioned. e himself retired from political life for a ne in order to carry through, as one of the ilway commissioners, the policy he had adfastly urged.

It was on June 13, 1854, that the first sod as turned for the construction of the Nova otia Railway, and a beginning made at last. ne road was to run from Halifax to Truro, th a branch to Windsor. Progress was slow, t by 1858 the ninety-three miles planned d been completed. Then came a halt, when ality succeeded the glowing visions of the ospectus, the service proved poor, and the urns low. Nine years later an extension m Truro to Pictou was constructed. This ve Nova Scotia at Confederation in 1867 5 miles of railroad in all, built at a cost of 4,000 a mile, and connecting Halifax with e Bay of Fundy and the Gulf of St Lawrence. ne gauge adopted was five feet six, and the va Scotia road led the way in Canada in ing coal for fuel.

New Brunswick had a more chequered perience. After the collapse of the Halifax d Quebec project, her efforts were confined

to the road running north from St Andrew and to the European and North American.

The possibilities of St Andrews as an ocea terminus had been severely hampered by th thrusting in of the Maine-wedge between Ne Brunswick and Quebec, but still the tow struggled on. In 1847 shares in the railw had been placed both in England and in t province, and the legislature guaranteed t interest on debentures and also granted a la subsidy. Still, the money came in slow Operations were time and again suspend contract after contract was made, and organizations were effected. In 1858 road had reached Canterbury, and four ye later its temporary terminus at Richmon in 1866 a branch to St Stephen was open and in 1868 an extension to Woodsto making 126 miles all told, costing ab $20,000 a mile. At Confederation only third of the distance between St Andr and Rivière du Loup on the St Lawre had been completed, and the road was i receiver's hands.

The European and North American had its troubles. Maine proved unable to build its section. In 1852 the New Brunsw government made a contract with the Eng

rm already referred to, under the style of eto, Betts, Jackson and Brassey, for the nstruction of a line from Maine to Nova cotia, at $32,500 a mile. The province agreed subscribe $6000 stock and lend $9400 in nds per mile; the contractors were to find e rest of the money in England. This they iled to do. The firm was dissolved in 1856, d the government took over the road, mpleting it from St John to Shediac, 108 iles, in 1860. The western half was not gun until August 1867.

To return to the upper provinces. By 1851 e St Lawrence, the Great Western, and the orthern were under way, and more ambi- ous schemes proposed. The Guarantee Act 1849, which was the first phase of Hincks's licy, assuring public aid for the second lf of any road at least seventy-five miles length, was proving inadequate, and the vernment was considering an extension of s policy. At this juncture the golden news rived of Howe's success in securing the ,000,000 loan at bargain rates. All hesita- on was removed. No doubt was felt that e roads would pay, once they were built; e only difficulty had been to find the money build them. And now £7,000,000 was

available—£4,000,000 of it for Canada, a probably 3½ per cent. Paper computation soon proved that £4,000,000 would suffice no only to build Canada's third of the Quebe Halifax route, but to build a trunk line fro Quebec or Montreal through to Hamilto whence the Great Western ran to Windsor o the frontier opposite Detroit.

At once a struggle began for the control this fund. The Montreal merchants who ha bought experience in building the St Lawren and Atlantic, John Young, Luther Holto and D. L. Macpherson, with A. T. Galt Sherbrooke, were first in the field, and press for a charter to build from Montreal to King ton, intending later to extend this road Toronto. Then the most noted firm of co tractors in railway history, Peto, Brasse Betts and Jackson (the forms of the firm nam varied), who had built one-third of the ra ways of Britain, and also roads in France a Spain and Italy and Prussia and India, we attracted to this fresh field by Howe's ca paign in England. They sent an agent Toronto in 1851 to offer to construct all t roads needed, and to find all the capital quired, with partial government guarantees

Hincks, with whom the decision lay, w

ninently an opportunist. In 1849 he had gued against government ownership; now he gued for it. Yet he did not close the door ainst retreat. The new Act, passed in April 52, marked the second or Grand Trunk phase his gradually shaping policy. Besides pro-ding for the Canadian share of the Halifax Quebec road, the Act contemplated three ternative methods of continuing this Trunk ne westward. The province was to build it the guaranteed loan could be stretched far ough; failing this, the province, together th such municipalities as wished, could ndertake the extension; should both modes il, private companies might be given the ivilege, with a provincial guarantee of half e cost, covering both principal and interest. o roads except those forming part of the unk line and the three already under way ere to be aided. The Montreal and Kings-n Railway, in which Holton, Galt, and Mac-nerson were prime movers, was chartered, d also the Kingston and Toronto, but in th charters a suspending clause was included eventing the charters from taking effect ntil special proclamation was made—after e other plans had failed.

The next move was to arrange terms with

the other provinces and secure the promis Imperial guarantee. How Hincks and Chan ler's mission failed has already been to Hincks then made another sharp curve a decided for company control. Before leavi Canada he had made up his mind that t construction should be entrusted to Briti contractors, and was authorized to negotia with the Brassey firm. Now that the I perial guarantee had faded away, capital w needed more than contractors. The Brasse promised both, offering, if given the contra to organize a company in England wh would provide all the capital not guarante by the province.

This seductive offer was to prove the m cause of the financial embarrassment of Grand Trunk. It involved at the outse dubious connection between company and c tractor, and also for two generations attempt to manage a great railway at a ra of three thousand miles. So fatal did it pr that in later years each party to it end voured to throw the responsibility for initiative on the other, and enemies of Hin declared that he, as well as Lord Elgin, governor-general, had been bribed to wr the negotiations with the British governm

n order to take up with Brassey. Whether r not Hincks was first to resume negotiations n London, it was the contractors who had lready taken the initiative in America, sending a representative to Toronto, and taking art in the elections of 1851 in Nova Scotia gainst Howe. It is clear also that the British overnment was unwilling to consider anything but the unacceptable Major Robinson ne. Hincks was justified in looking elsewhere for capital, but he was not justified in inding himself to one firm of contractors, owever eminent.

Hincks returned to Canada with a tentative ontract in his pocket. To Canada, too, came lenry Jackson, a partner in the Brassey firm or this enterprise, and one of the most skilful nd domineering of the railway lobbyists in anada's annals, rich in such methods. At nce a battle royal began in parliament. On ugust 7, 1852, the Montreal and Kingston nd the Kingston and Toronto charters were roclaimed in force; apparently the supposition of the government was that the English ontractors would simply subscribe for the ulk of the stock in these companies. But the anadian promoters were not willing to give p their rights so easily: a week after the

books were opened, Galt, Holton, and Mac pherson subscribed between them £596,50 and seven of their associates took up th nominal balance of the capital of £600,00 which was authorized. Hincks met this mov by bringing down a bill to incorporate a ne company, the Grand Trunk Railway Compan of Canada, and the rights of the rival claiman came before parliament for decision.

On behalf of the English promoters it wa urged that the Canadian promoters could n raise the necessary capital, that the Gal Holton-Macpherson subscription was a fak that the English contractors could indu capitalists to invest freely at low rates, an that their superior methods would result in road of more solid construction and low working expenses than the ordinary America railway. Holton and Galt, on the other han contended that their subscription was in goo faith, that tenders were in, and that with pr vincial guarantee and municipal aid, and paying the contractors partly in stock, th could finance the road. It would be bett they urged, to have the control in the han of men who knew the province rather than the hands of outsiders. The Grand Tru Company, seeking incorporation, was only

ıam company, under the thumb of the con-
actors, formed to ratify a foregone contract
ith them. If the Montreal and Kingston
ompany was given control, it would invite
ıe Brassey firm to tender on the same basis
other contractors: no more could honestly
asked.

Galt and Holton had the best of the argu-
ent, but Hincks had the votes, and rumours
hich Jackson spread of the Brassey millions
ıd the firm's open door to all the money
arkets of Europe brought conviction or
forded excuse. The railway committee re-
orted in favour of the English promoters,
ıough the competition had compelled them
reduce their price by a thousand pounds a
ile, and to accept a guarantee of £3000 per
ile instead of half the cost. At the same
me the Brassey firm secured a charter for
ıe Grand Trunk of Canada East, to run from
uebec to Trois Pistoles—Canada's first section
the Halifax to Quebec route. The same
ggressive firm had already secured a contract
r the Quebec and Richmond, which was to
in the St Lawrence and Atlantic at Rich-
ond, and, as has been seen, for New Bruns-
ick and Nova Scotia roads. With these
ntracts seemingly secure, Jackson sailed for

home. But Canadian promoters were quick to learn. Galt had another card to play. As president of the St Lawrence and Atlantic he proposed to amalgamate this road with the Montreal and Kingston, and to build a bridge at Montreal, thus securing an essential part of the trunk line. Hincks became alarmed at the Montreal interests thus arrayed against him, and proposed as a compromise that the Grand Trunk should absorb the St Lawrence road and build the bridge at Montreal on the condition that the opposition to its westward plans should be abandoned. Upon this all parties agreed, and the English and Canadian promoters joined forces.

Negotiations were completed in England early in 1853. As yet the Grand Trunk Company was but a name. The real parties to the bargain were many. First came John Ross, a member of the Canadian Cabinet, but representing the future Grand Trunk, of which he was elected president. The Barings and Glyns, eminent banking houses, had a twofold part to play, as they were closely connected with the contractors and were also the London agents of the Canadian government. The contractors themselves, Peto, Brassey, Betts and Jackson, of whom Jackson, accompanied

y the company's engineer, A. M. Ross, had pent a year studying the Canadian situation, ut in anxious weeks hammering out the etails of the agreement and the prospectus o follow it. Galt represented the St Lawrence nd Atlantic and the Atlantic and St Lawrence, hile Rhodes and Forsythe of Quebec had harge of the interests of the Quebec and ichmond. An agreement was reached to malgamate all the Canadian roads and to ease the Maine road for 999 years. This left oronto the western terminus. An attempt o absorb the Great Western and thus secure n extension to Windsor came to nothing. his failure gave Galt an opening for another rilliant stroke of railway strategy. A com- any had recently been chartered to build a oad from Toronto to Guelph and Sarnia, and he firm of Gzowski and Co., of which Galt as a member, had secured the contract. Galt, cting with Alexander Gillespie, a prominent ondon financier who was the agent of the oronto, Guelph and Sarnia Railway, now roposed to substitute this line as the west- ard extension. Everybody was in an amal- amating mood, and the bargain went through. ll contracts previously made were taken ver by the amalgamated company, and the

investing public was told that all uncertainty as to the total amount was thus removed—as it emphatically was, for the time.

A glowing prospectus was drawn up. The amalgamated road would be the most comprehensive railway system in the world, comprising 1112 miles, stretching from Portland and eventually from Halifax (by both the northern and the southern route) to Lake Huron. The whole future traffic between west and east must therefore pass over the Grand Trunk, as both geographical condition and legislative enactment prevented it from injurious competition. 'Commencing at the debouchere [*sic*] of the three longest lakes in the world,' the prospectus continued, 'it pours the accumulating traffic in one unbroken line throughout the entire length of Canada into the St Lawrence at Montreal and Quebec, on which it rests on the north, while on the south it reaches the magnificent harbours of Portland and St John on the ocean.' It was backed by government guarantee and Canadian investment, and its execution was in the hands of the most eminent contractors. The total capital was fixed at £9,500,000 sterling. The revenue was estimated at nearly £1,500,000 a year, which, with working expenses at *for*

er cent of revenue, and debenture interest
nd £60,000 for lease of the Atlantic and St
awrence Railway deducted, would leave
550,000 or 11½ per cent on the share capital.
On the advice of Baring and Glyn only
alf the capital was issued at first. This
ecision proved a serious mistake. In 1853,
hen the company was floated, money was
undant and cheap; the shares and bonds
sued were over-subscribed twenty times, and
ere quoted at a premium before allotment.
carcely was the issue made when war with
ussia loomed up, and money rose from three
seven or eight per cent. Never again was
possible for the Grand Trunk to secure
pital in such abundance.

But this was for the future to disclose. At
nce construction began in Canada. A. M.
oss was appointed chief engineer, and S. P.
idder general manager, both on the nomina-
on of the English bankers and contractors.
lant was assembled in Canada, orders for
ils and equipment were placed in England,
nd navvies came out by the thousand. At
ne time 14,000 men were directly employed
on the railways in Upper Canada alone.
July 1853 the last gaps in the St Lawrence
nd Atlantic had been filled up, though not

in permanent fashion. In 1854 the Quebec and Richmond section was opened; in 1855, the road from Montreal to Brockville and from Lévis to St Thomas, Quebec; in 1856, the Brockville to Toronto and Toronto to Stratford sections. Not until 1858 was the western road completed as far as London. The year 1859 saw the completion of the Victoria Bridge, the extension from St Mary's to Sarnia, and a new road in Michigan, running from Port Huron to Detroit. By 1860 the eastern section extended to Rivière du Loup where a halt was made.

From the outset difficulties undreamed of had developed. Money was hard to get and early traffic returns were disappointing, so that the company found it almost impossible to secure the balance of the capital required. The road from Montreal to Portland was found to require heavy expenditure to bring it up to the standard. The contractors, for their part, were embarrassed by the company's shortage of funds and by the great rise in the prices of land, materials, and labour. The own activities, the Reciprocity Treaty of 1854 with the United States, the Crimean War, had combined to bring on a period of inflated prices such as Canada was not to experience

gain for half a century. With wheat at two llars a bushel, and 'land selling by the ch,' even liberal margins of profit on ntracts vanished.[1]

In these straits the company turned to the vernment for aid. It had many supporters the House. No one could deny the benefits nich its operations had conferred upon the ovince. The government guarantee of in-rest and the government nomination of a rt of the board of directors were plausibly ld to involve responsibility for the solvency the company. It was not surprising, there-re, that for a decade after 1855 scarcely a ar passed without a bill to amend the terms

[1] The Brassey firm were paid about £9000 sterling a mile for line from Toronto to Montreal, £8000 for the section from ebec to Rivière du Loup, £6500 for the Quebec and Richmond d, and £1,400,000 for the Victoria Bridge. Gzowski and , consisting of Messrs Gzowski, Holton, Macpherson, and lt, secured the Toronto to Sarnia contract at £8000 a mile. both cases these prices included equipment. The English tractors were required to take a large portion of their pay depreciated bonds and stock, whereas the Canadian con-ctors were given cash; on the other hand, Brassey had a her price and less difficult country to work in. The English n, with all their experience, were not familiar with building ds in countries where labour was dear, and the plant they t out was antiquated compared with the labour-saving equip-nt familiar to American and Canadian contractors. They imed to have lost a million pounds on their enterprise, while lt, Holton, Macpherson, and Gzowski all made fortunes.

of the Grand Trunk agreement. One year i was an additional guarantee, another a tem porary loan, again a postponement, and agai a still further postponement of the govern ment's lien. It soon came to be recognize that the money which had been advance under the guarantee provisions must be co sidered a gift, not a loan, though to this da the amount nominally due still figures as a asset on the Dominion government's book Incidentally, the embarrassing governme directors were dispensed with in 1857.

The Grand Trunk was complete from La Huron to the Atlantic in 1860. In the te years that followed, working expenses varie from fifty-eight to eighty-five per cent of t gross receipts, instead of the forty per ce which the prospectus had foreshadowed ; n a cent of dividend was paid on ordina shares—nor has been to this day.

What were the reasons for this disappointi result ? The root of the trouble was that t road was not built solely or even mainly wi a view to operating efficiency and earni power. It was the politicians' road, the pr moters' road, the contractors' road, at le as much as the shareholders' road. T government had encouraged the building

profitable sections, such as that east of uebec, for local or patriotic reasons. Pro- oters had unloaded the Portland road and er the Detroit and Port Huron road at cessive prices. The contractors, east of ronto, had had an eye mainly to construc- n profits in planning the route, and heavy ades, bad rails, and poor ballast increased intenance charges beyond all expectations. e prophecy that operating expenses would t exceed forty per cent of earnings, based English experience, failed partly because nings were lower, but more because operat- expenses were higher, than anticipated. e company had more than its share of hard k from commercial depression, and from s on American paper money in the Civil ar. Water competition proved serious in east, while other railways waged traffic rs in Upper Canada. The trade of the far st, which had been the most attractive lure, not come in any great amount for the t twenty years. Differences of gauge, lack permanent connections at Chicago, lack of urn freight, rate wars with the American ds which had been built west at the same e or later, the inferiority of Montreal to w York as of old in harbour facilities and

ocean service, the failure of Portland to be come a great commercial centre—all mean hope and dividends deferred. Finally, th management was working at long range: th road did not enjoy the vigilant inspection o the public support that would have attende control by Canadian interests.

The Grand Trunk did Canada good servic well worth all the public aid that was give It would probably have given better servic and its shareholders could not have fare worse, had the plans of Galt and his associat not been interfered with, and the line bee built gradually under local control.

While the building of the Grand Trunk w the main achievement of the period, it was no means the only one. The fifties were t busiest years in the railway annals of old Canada. In 1850 there were only 66 mi of road in all the provinces. In 1860 the were 2065, of which over 1700 had be added in the Canadas alone. The Gre Western and the Northern were pushed f ward under the provisions of the earl Guarantee Act; roads of more local inter were fostered by municipal rivalry. Th building brought unwonted activity in ev

anch of commerce. A speculative fever ran rough the whole community; fortunes were ade and lost in the provision trade, and land ces soared to heights undreamed of. This od was the promoter's happy chance, and ll more charters were sought. The pace ickened till exhaustion, contagious American nics, poor harvests, and the Crimean War which first raised the price of the wheat nada had to sell, but later raised the price the money she had to borrow—brought llapse in 1857.

In this boom period jobbery and lobbying gned to an extent which we rarely realize our memory of the good old times. Rail- y contractors were all-powerful in the legis- ure, and levied toll at will. The most table 'contractor-boss' of the day was able, aling with the Great Western, to hold up a l for double-tracking until assured of the ntract himself; dealing with the Grand unk, to force from the English contractors share in the enterprise before consenting to lp their schemes through; with the North- n, to collect $100,000 as a condition of secur- g from the government the guarantee bonds fore they had been rightly earned. Muni- pal officials were bribed to help bonuses

through. Existing roads were blackmailed b pedlars of rival charters. Glaringly fraudu lent prospectuses were issued. On a smalle scale, the excitement and the rascality whic had marked the beginning of the great rai way eras in the United Kingdom and th United States were reproduced in Canada.

Of the other roads completed in this perio the two which had been aided by Hincks first Guarantee Act were most important.

The Great Western had a promising outloo It ran through a rich country and had assur prospects of through western traffic. Th road was completed from Suspension Brid to Windsor in January 1854. An extensi from Hamilton to Toronto was built in 18 and a semi-independent line from Galt Guelph absorbed in 1860. The Great Weste came nearest of any early road to being financial success; alone of the guarante roads it repaid the government loan, nea in full. But after a brief burst of prosperi from 1854 to 1856, it, too, was continually difficulties. In 1856 it paid a dividend 8½ per cent, but three years later it p nothing, and in the next decade averaged than three per cent.

The troubles of the Great Western ca

iefly from competition, actual and threat-
ied, and uncertain traffic connections. To
ie north, the chartering of the Toronto,
uelph and Sarnia, amalgamated later with
ie Grand Trunk, cut into its best territory.
n endeavour was made in 1854 to divide the
maining area, but two years later the battle
as renewed, the Great Western building to
arnia and the Grand Trunk tapping London
id Detroit. Between the Great Western and
ake Erie a rival road direct from Buffalo to
etroit was threatened time and again, but
as not built until after Confederation. South
Lake Erie the Lake Shore and Michigan
outhern was built shortly afterwards by in-
rests connected with the New York Central,
ius threatening the traffic connections of the
reat Western both east and west. To avert
ss of its western trade, the Great Western
ink large sums in aiding the construction of
road from Detroit to Grand Haven, with
rry connections to Milwaukee; but this ex-
eriment did not prove a success and caused
erious embarrassment.

The Northern Railway, whose promoters,
s we have seen, naïvely recognized that rail-
ays and lotteries were close akin, was opened
s far as Allandale in 1853, and to Collingwood

in 1855. It was scamped by the contractor
poorly built, and overloaded with debt. Th
sanguine policy of building up a throug
traffic from the American West, by water t
Collingwood and rail to Toronto, proved
will-o'-the-wisp. In turn the company relie
on independent steamers, and set up a fle
of its own, but equally in vain so far as prof
went. By 1859 the road was bankrupt.
new general manager, Frederick Cumberlan
brought in a change of policy. Local traf
was sedulously cultivated, and a fair degr
of prosperity followed.

Most of the lesser roads constructed look
to the municipalities rather than to the pr
vinces for aid. The Municipal Loan Fund
1854 was the third and last phase of Hinck
railway policy. This was an ingenious attem
to give the municipalities the prestige of pr
vincial connection without accepting any leg
responsibility. Municipalities had previous
been permitted to bonus or take stock in ra
ways and toll-roads, but their securities we
unknown in the world's markets. Hinc
now provided that municipalities which wish
money to aid railways or other local improv
ments might practically pool their credit a
share in the credit of the province. Provinc

ebentures were issued against the municipal ligations pooled in the Fund, and the proeeds of their sale given to the municipalities. sinking fund was to be maintained, and, if eed be, the province could levy through the eriff on any defaulting town.

The municipalities made full use of their rivileges. It was believed that railway inestments would yield high dividends, and ie more optimistic expected to see all taxes ade unnecessary by the profits earned. own vied with town in extravagant enterrises.[1] Not a cent brought a dividend; inead, the municipalities found themselves ddled with heavy interest payments. One ter another declined to pay; Port Hope as $312,000 in arrears by 1861 and Cobourg 313,000. The provincial government had

[1] Port Hope borrowed for railway investment $740,000, bourg and Brantford $500,000 each, and Brockville $400,000 all towns of less than 5000 people. The counties of Lanark d Renfrew borrowed $800,000, and villages borrowed in proortion. In all some $6,500,000 was borrowed through the Loan und for railway purposes alone, the bulk of it in Upper Canada, hile another three million was invested by towns that borrowed their own responsibility. To aid the Brockville and Ottawa ailway, for example, Lanark and Renfrew advanced $800,000, rockville $415,000, and the township of Elizabethtown $150,000, over half the cost of the road. Huron and Bruce invested 00,000 in the Buffalo and Lake Huron, and other municipalities 78,000, and so on throughout the province.

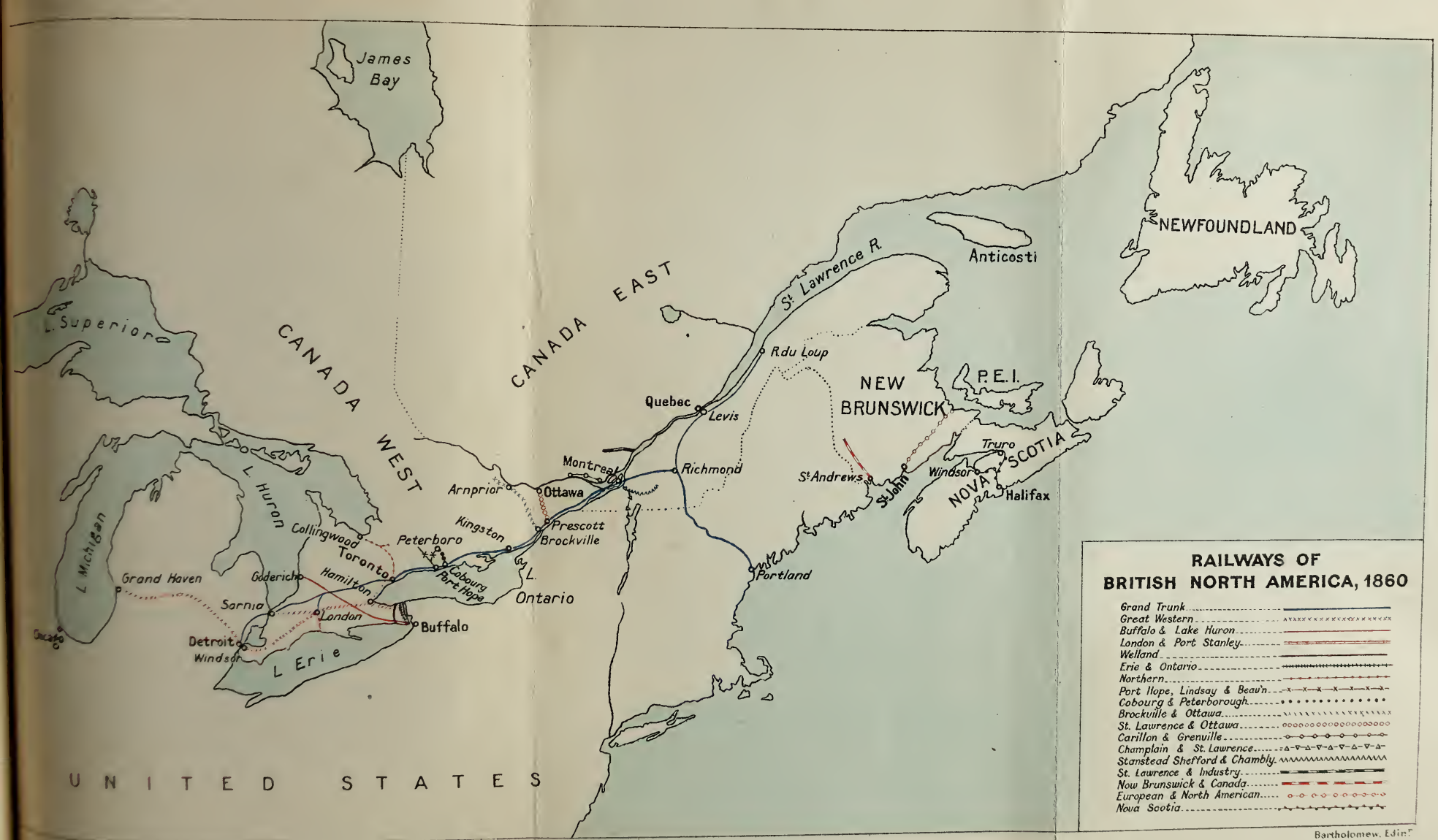
not the political courage to send in the sheri
and accordingly it was forced at last t
assume the whole burden. Prudent munic
palities which had declined to borrow at eig
per cent found themselves compelled to sha
the burdens of their reckless neighbours. D
moralization was widespread.

The railways constructed by such aid ma
be briefly noted. The Buffalo and La
Huron, extending from Fort Erie to Goderic
was completed in 1858. It had its origin
the ambition of Buffalo to have more imm
diate connection with the rich western peni
sula of Upper Canada and the Lake tra
beyond than was afforded by the Gre
Western. The London and Port Stanle
built in 1854-56, mainly by the city of Londo
with smaller contributions from Middlesex a
Elgin counties and the city of St Thoma
failed to realize the expectations that it wou
become the main artery of trade betwe
Canada and the states across the lake, but
developed a fair excursion trade and c
traffic, and indirectly justified its constructio
The Erie and Ontario portage road, rebuilt
1854, has already been noted. Another po
age road round Niagara Falls was the Wella
Railway, planned by W. Hamilton Merri

ıe projector of the Welland Canal. It ran om Port Colborne on Lake Erie to Port alhousie on Lake Ontario, twenty-five miles, ıd was completed in 1859, only to add one ore to the list of unprofitable roads, and ventually to be absorbed by the Great Vestern.

Farther east the rivalry of Port Hope and obourg led to the construction of two roads, ıe Cobourg and Peterborough and the Port ope, Lindsay and Beaverton. Both relied ıiefly on timber traffic and aimed to develop ıe farming country in the rear. The Cobourg ıe, begun in 1853, suffered disaster from the art: the contractor's extras absorbed all ıe cash available; the three-mile bridge ıilt on piles across Rice Lake gave way, and ter $1,000,000 had been expended the road as sold for $100,000. The Port Hope line, hich absorbed a branch from Millbrook to eterborough in 1867, fared somewhat better. he Brockville and Ottawa was a lumber road, ırrying supplies up and timber down. It as chartered to run from Brockville to Pem- oke, with a branch from Smith's Falls on ıe Rideau Canal to Perth. By 1859 it had ached Almonte, and six years later struggled far as Sand Point on the Ottawa, when it

halted, till the Canadian Pacific project gave it new life. After failing to make ends meet for some years the company went through repeated reorganizations in the early sixties. The Bytown and Prescott, later the St Lawrence and Ottawa, built in 1854, was also a lumber road, promoted by interests connected with the Ogdensburg Railway, whose terminus was opposite Prescott. It suffered the same financial fate, and was sold to the English company which had supplied the rails, at a total sacrifice of municipal and other creditors' interests. Around the Long Sault rapids in the Ottawa there was built in 1854 the thirteen-mile Carillon and Grenville, a summer portage road, an early enterprise which retained its independence and its old five-foot-six-inch gauge until 1912, when it was absorbed by the Canadian Northern. In Lower Canada the only minor road built which has not been referred to was the Stanstead, Shefford and Chambly, opened in 1859 from St Johns to Granby, and forming practically an extension of the Champlain and St Lawrence from the former point.



Bartholomew. Edin.r

CHAPTER VI

THE INTERCOLONIAL

E first 'age of iron—and of brass' came to end before 1860. Between 1850 and 1860, has been seen, the mileage of all the pro- ces grew from 66 to 2065. By 1867 it had reased only 213 miles. In two of the ervening years not a mile was built. A t had come, for stock-taking and heart- rching.

This first era of activity had given as its st obvious result over two thousand miles railway. In Nova Scotia, Halifax was ked with the Bay of Fundy and the Gulf St Lawrence; in New Brunswick, St John s connected with the Gulf, and a road was uggling Canadaward from St Andrews. In Canadas a 'Grant Trunk,' so nicknamed, from Rivière du Loup the whole length of province to Sarnia, while lesser roads ened up new districts to the north or gave nection with the grain-fields and the ocean

ports of the United States. The western pro
vince, at all events, was well served for
pioneer country, and the shipper and consume
had no great cause for complaint.

To the taxpayer it seemed otherwise. H
had been induced to embark on a lavis
policy of financial aid on the assurance tha
the roads would at worst be no burden, an
at best might yield large profits to the stat
As a matter of fact, nine out of every te
dollars advanced might be written off
lost. The Grand Trunk, Great Western, an
Northern roads were indebted to the old pr
vince of Canada on July 1, 1867, in over twen
million dollars for principal advanced and
over thirteen millions for interest. Oth
roads were indebted to Canadian municipaliti
in nearly ten millions for principal alone. Y
the taxpayer was not wholly justified in
grumbling. There had been waste and m
management, it is true, but the railways h
brought indirect gain that more than offs
the direct loss. Farming districts were open
up rapidly, freights were reduced in ma
sections, intercourse was facilitated, and la
values were raised. The contribution to t
railways was bread well cast upon the wate
It would have been better, if foresight h

ialled hindsight, to have given the money
and out.

For the shareholder, English or Canadian,
re was little but disappointment. Grand
ink ordinary stock in 1865 was selling at 22,
l even Great Western at 65. The securities
several of the minor roads had been almost
irely wiped out by reorganizations. In
6 some $4,180,000 was paid in dividends
l leases, representing only 2·7 per cent on
$158,000,000 which the roads had cost or
e alleged to have cost. Premature exten-
n into unremunerative territory, for political
contracting reasons, excessive competition
the fertile areas, heavy fixed charges on
ated capital or leased roads, water com-
ition, absentee proprietorship, all played
ir part. Whatever the causes, the results
e clear, and capitalists long fought shy of
nadian railway projects.

n the first thirty years of Canadian rail-
y development no question aroused more
erest than that of the gauge to be adopted.
e cows of the good Dutch burghers of New
sterdam fixed the windings of Broadway
hey remain to this day. The width of the
ts used in English coal-mines centuries ago

still determines the gauge of railway trac
and railway cars over nearly all the worl
'Before every engine,' declares Mr H.
Wells, 'trots the ghost of a superseded horse
When the steam locomotive was invente
and used upon the coal-mine tramways, it w
made of the same four-foot-eight-and-a-ha
inch gauge. In England, in spite of the pr
ferences of Brunel, Stephenson's great riv
for a seven-foot gauge, the narrower wid
soon triumphed, though the Great Western c
not entirely abandon its wider track un
1892. In Canada the struggle was longer a
more complicated.

It was a question on which engineers differe
Speed, steadiness, cost of track constructi
and cost of maintenance were all to be co
sidered, and were all diversely estimat
In early years, before the need of standa
izing equipment was felt, many experime
were made, especially in the United Stat
In the southern states five feet was the us
width, and the Erie was built on a gauge
six feet, to fit an engine bought at a b
gain. But in the United States, as in Engla
the four-foot-eight-and-a-half-inch width
dominant, and would have been adopted
Canada without question, had not lo

terests, appealing, as often, to patriotic rejudice, succeeded in clouding the issue.

When the road from Portland to Montreal as being planned, the astute Portland pro-oters insisted upon a gauge of five feet six ches, to prevent the switching of traffic to oston. Montreal, in its turn, insisted on e same gauge for the Grand Trunk line, to sure that all east-bound traffic should be ought through Canada to Montreal. It rried its point, and the wider or 'provincial' uge became the standard in the Canadas, d later in the Maritime Provinces.

Experience proved that it was impossible maintain different gauges in countries so osely connected as Canada and the United ates. As roads became consolidated into rger systems, the inconvenience of tran-ipping at break of gauge became more tolerable. The expedients of lifting cars odily to other trucks, of making axles djustable, and even of laying a third rail, oved unsatisfactory. Late in the sixties d early in the seventies the Great Western d the Grand Trunk had to adopt the four-ot-eight-and-a-half-inch gauge solely, and her lines gradually followed.

Meanwhile, the cry was going up for a still

narrower gauge. In pioneer districts, at leas
it was contended, a road three feet six inche
wide, such as had recently been adopted i
Norway, would suffice, and would be muc
cheaper both to build and to operate. Be
tween 1868 and 1873 two experimental narrow
gauge lines were built running north fro
Toronto—the Toronto and Nipissing, and th
Toronto, Grey and Bruce. This proved on
a temporary diversion, however, and th
decision of the Dominion government in 18
to change the gauge of the Intercolonial
four feet eight and a half inches, and th
adoption of the same standard by the Ontar
government, ended the controversy.

Memory is short and hope eternal. So
after Confederation another burst of activi
began in all the provinces of the new Dominio
It was distinctly the period of local develo
ment.

In Ontario the opportunity which the fert
western peninsula, jutting down between N
York and Michigan, offered for both local a
through traffic, led to many projects, mu
parliamentary jockeying, and at last co
struction. The Canada Southern was bu
in 1873, running between Fort Erie, oppos

ffalo, and Amherstburg on the Detroit
er. It was controlled by the Vanderbilt
erests and operated in close co-operation
h their other roads, the Michigan Southern,
chigan Central, and New York Central.
e Great Western met this attack upon its
serves by building in the same year the
nada Air Line, from Glencoe near St
omas, to Fort Erie, giving more direct
nection with Buffalo. Both roads made
of the magnificent International Bridge,
lt across the Niagara in 1873, under Grand
nk control.

The marked feature of this period, so far as
tario was concerned, was the rivalry of the
es along the lake and river front in building
roads to tap the north country. From
ndon there was built in 1875 the London,
ron and Bruce, halting at Wingham. From
milton, or rather from Guelph, with con-
tions to Hamilton, the Wellington, Grey
Bruce reached Southampton on Lake
ron in 1873 and Kincardine in 1874. Both
ds were virtually branches of the Great
stern, and were expected to bring to
ndon and to Hamilton respectively the
le of the rich northwestern counties. The
bitious City, as Hamilton came to be

called at this period, a few years later
vaded the Northern Railway's territory by
line from Hamilton to Collingwood, also
tended southerly to Port Dover, but control
this road was immediately acquired by
Northern interests. From still more am
tious Toronto two narrow-gauge routes w
built between 1869 and 1874—the Toron
Grey and Bruce running northwest to Ow
Sound and Teeswater, and the Toronto
Nipissing northeast to Coboconk and Sutt
Whitby also had its visions of terminal gre
ness, when the Whitby and Port Perry
built in the later seventies. The Port Ho
Beaverton and Lindsay, renamed the Midla
was pushed northeast to Orillia in 1872
to Midland in 1875. Cobourg's unfortun
northern line was continued to the iron m
of Marmora. Belleville was linked with Pe
borough in 1878-79 by the Grand Junct
Kingston, with the co-operation of inter
in New York state, planned the King
and Pembroke, which reached Mississip
1878, and five years later compromised
Renfrew as a terminus. The bankruptc
the Brockville and Ottawa did not pre
its extension through an allied company
Canada Central, to Pembroke in 1869 an

:tawa, by a branch from Carleton Place, in 76.

In Quebec the chief developments were the ilding of a line connecting Quebec, Montreal, d Ottawa along the north shore of the St wrence, and of further connections between ntreal and Quebec and United States roads. ie North Shore route had been projected rly in the fifties, but, in spite of lavish cash d land bonuses, it was not until the Quebec vernment took it up as a provincial road, in e seventies, that it was pushed to comple- n. On the south shore the Eastern Town- ips triangle was interlaced by a series of aller roads. From Lévis, opposite Quebec, e Lévis and Kennebec ran south to the aine border, and the Quebec Central to erbrooke. From Sherbrooke and Lennox- le the Massawappi Valley gave connection th the Connecticut and Passumpsic, to ich it was leased for 999 years, while anches of the Central Vermont and minor ads opened up new sections and gave further nnection with Montreal.

An interesting experiment, motived by the me desire for cheap pioneer construction ich in Ontario brought in the narrow gauge, s the wooden railway built in 1870 from

Quebec to Gosford. The rails were simp
strips of seasoned maple, 14′×7″×4″, notch
into the sleepers and wedged in without t
use of a single iron spike. The engine a
car wheels were made wide to fit the rail.
spite of its cheap construction the road d
not pay, and the hope of extending it as
as Lake St John was deferred for a generati
A similar wooden railway was built fr
Drummondville to L'Avenir.

In Nova Scotia the chief local developme
was the opening in 1869 of a road throu
the Annapolis Valley, the Windsor a
Annapolis. This formed an extension of
government road from Halifax to Winds
but the province preferred to entrust it t
private company, giving a liberal bonus.
New Brunswick there was much activity,
by private companies. The western sect
of the European and North American, f
St John to the Maine boundary, was c
pleted in 1869, though it was not until 1
that the road was opened through to P
land—by a more circuitous route than P
had originally planned. From Frederict
branch was built to meet this road, and a
to Woodstock, which in turn was connec
with the old New Brunswick and Canada,

ushing slowly north. In the meantime Prince dward Island was building a narrow-gauge ilway nearly two hundred miles long; in 73 she was forced into Confederation to find d in paying for it.

All this varied activity was made possible by revival of the policy of provincial and muni-pal assistance. Whether from reasoned con-ction as to the indirect benefits of more ads, or because of the log-rolling activities rival towns and wily promoters, a syste-atic and generous policy of aid was adopted. his aid came chiefly from the provinces and unicipalities, the Dominion as yet confining self to works of inter-provincial concern. utright gifts for the most part took the place loans, since experience had proved that rect returns upon the money invested were ot to be looked for. Curiously meandering ere the routes which promoters mapped out the endeavour to follow the shortest line etween two bonuses.[1]

[1] Ontario in 1871 offered subsidies ranging from two to four ousand dollars a mile for colonization roads to the north; uebec in 1869 offered money and later land; New Brunswick 1864 gave $10,000 a mile to various roads, besides taking 00,000 in stock in the European; while Nova Scotia aided the napolis extension. Municipal aid was even more lavish in portion: Toronto gave $350,000 to the Toronto, Grey and

Governments could help to build roads, bu could not ensure for them traffic. It too very few years to show that the interests the public were not best served by scor of petty isolated roads, and that the inte ests of shareholders were not secured b the cut-throat competition which prevail in certain areas. This competition w keenest between the roads which were int mately connected with the lines in t United States and dependent upon throu traffic. The Grand Trunk had cut into t territory of the Great Western by acquiri the Buffalo and Lake Huron line, and t Canada Southern and the Great Western we disputing for every ton of freight between t Niagara and the Detroit. All were involv in the rate wars which marked this period

Bruce, $150,000 to the Nipissing road, $100,000 to the North and $350,000 to the Credit Valley. Hamilton backed the Ha ton and North-Western by $200,000, London gave the Lon Huron and Bruce $150,000, and generous Kingston gave to Kingston and Pembroke over $300,000. Counties like Elgin Simcoe, Grey, and Frontenac offered from $150,000 to $300 while from townships alone the Wellington, Grey and B received $680,000. Montreal and Quebec each helped the N Shore by a gift of a million dollars; Ottawa county's $20 and the parish of Canrobert's $1000 were equally sought; w to a lesser degree the Maritime Provinces showed the s tendency.

e United States. In 1867 the Grand Trunk
id the Great Western agreed to maintain
tes, pool certain traffic receipts, refrain
om competitive building, and co-operate in
rvice. The agreement broke down; another
as made in 1876, only to fail in turn. More
fective measures had to be adopted.

The outstanding achievement of the period,
wever, was the building of the Intercolonial.
had been projected largely in order to make
oser union between the provinces possible,
it, as it turned out, it was Confederation
at brought the Intercolonial, not the Inter-
lonial that brought Confederation.

After the breakdown of the negotiations in
ndon in 1852, each province had turned to
own tasks. But each in building its own
ads had provided possible links in the
ture Intercolonial chain. In Canada the
and Trunk ran to a point 120 miles east of
uebec; in New Brunswick, St John was
nnected with both the east and west boun-
ries of the province; in Nova Scotia, a road
n north from Halifax as far as Truro. A
p of nearly five hundred miles between
vière du Loup and Truro remained. To
idge this wilderness seemed beyond the

private or public resources of the divide provinces. Unanimous on one point only they once more turned to the British gover ment. In 1857 and 1858 dispatches and d putations sought aid, but sought it in vai When the Civil War broke out in the Unite States, official British sympathy was given the South, and the *Trent* affair showed ho near Britain and the North were to war, a w which would at once have exposed the isolat colonies to American attack. The milita argument for closer connection then took new weight with the British government, a it proposed, to a joint delegation in 1861, revert to its offer of ten years earlier— guarantee a colonial loan for a railway by approved route. The colonies opposed t demand for a sinking fund, and again agre ment was postponed. In 1863 Canada su gested that, as the British government h made an approved route an essential co dition, a definite survey and selection shou be undertaken forthwith. It was agreed th a commission of three engineers should selected, one nominated by Canada, one New Brunswick and Nova Scotia, and one Great Britain. Canada nominated Sandf Fleming, a distinguished Scottish-Canad

ngineer, who had been connected with the orthern and other Upper Canada enterprises. he other authorities paid him the compliment naming him as their representative also, facilitate the work. During the progress the survey negotiations for the union of the rovinces had begun, and when Confedera- on came about in 1867, the building of the ntercolonial at the common expense of the ominion, with an imperial guarantee to the xtent of £3,000,000, was one of the conditions union. The old difficulty as to the route rough New Brunswick was still to be settled. gain western and southern New Brunswick ruggled against the north and against far st Quebec; again Halifax and St John und plausible arguments to uphold their spective interests. Finally, the views of Sir eorge Cartier and Peter Mitchell triumphed the Cabinet councils, and in March 1868 the ngineer-in-chief advised the selection of the undabout Bay of Chaleurs route—roughly Major Robinson's line'—ostensibly because fer from American attack, nearer possible eamship connection with Europe, and no orse, if no better, than the other routes in otentialities of local traffic.

The construction was entrusted in December

1868 to a commission of four ; six years late the minister of Public Works took over direc control. Sandford Fleming remained engineer in-chief for the building as well as for th survey. Tenders were submitted for the con struction of the whole road, but the govern ment decided to award the contract in sma sections. The road was not completed a speedily as had been expected. Difficulti arose, expected and unexpected—cuttings heavy rock, sliding clay banks, extensiv swamps, lack of rock bottom for heav bridges. Contractor after contractor foun that he had underestimated the task, an went bankrupt or threw up the contrac Sometimes the contract was relet, sometim the government completed it by day wor At last, on July 1, 1876, nine years aft Confederation, the five hundred miles betwe Truro and Rivière du Loup were opened traffic throughout. In the meantime t Dominion had taken over the Nova Scot New Brunswick, and Prince Edward Isla government roads. In 1876 there were in 950 miles of railway under the control of t Dominion government, as against 4268 m of private lines.

CHAPTER VII

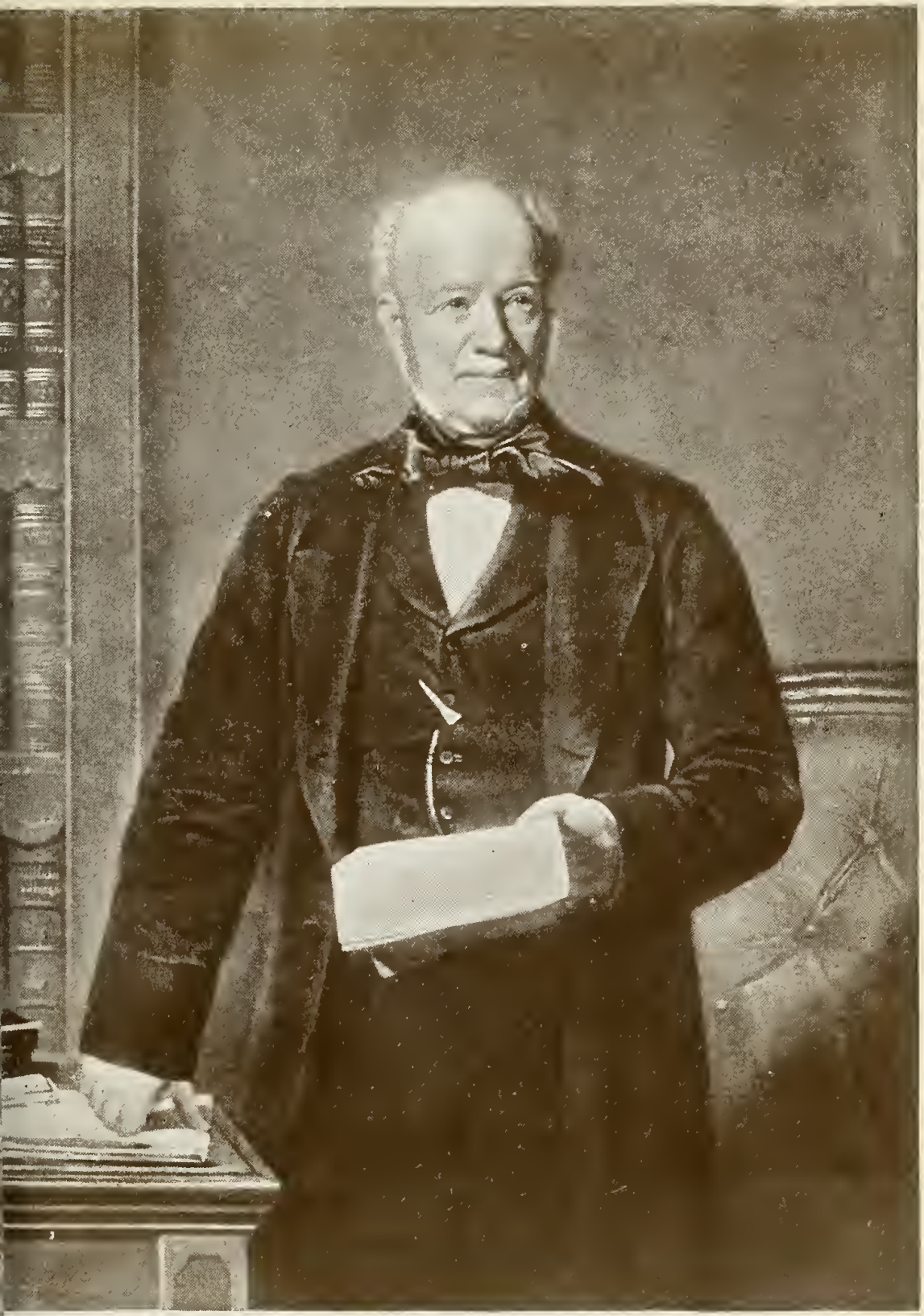
THE CANADIAN PACIFIC—BEGINNINGS

ON March 3, 1841, Sir George Simpson, overnor-in-chief of the Hudson's Bay Company's domains, left London on a journey ound the world. All the resources of a owerful and well-organized corporation were t his disposal, and his own reputation for apid travelling gave assurance that on the ctual journey not an hour would be lost. fortnight's sail brought him from Liverpool Halifax, and thence he journeyed by eamer to Boston, by rail to Nashua, by oach to Concord, and by sleigh to Montreal. he portage railway from St John to Laprairie as on his route, but it was not open in inter.

From Montreal Sir George and his party set ut on May 4 in two light thirty-foot canoes, ach carrying a crew of twelve or fourteen men. t top speed they worked their way up the ttawa and the Mattawa out to Lake Nipissing,

and down the French River into Georgian Bay. They camped every night at sunset, and rose each morning at one. Their tireless Canadian and Iroquois voyageurs worked eighteen hours a day, paddling swiftly through smooth water, wading through shallows, or towing the canoes through the lesser rapids, or portaging once to a dozen times a day round the more difficult ones. Each voyageur was ready to shoulder his 180 pounds, strapped to his forehead, or to ferry passengers ashore on his back. They reached Sault Ste Marie on May 16, only to find Lake Superior still frozen. They picked their way very slowly through the opening rifts along the shore, made the Company's post at Fort William in eleven days, exchanged their large canoes for smaller craft, and paddled and portaged through the endless network of river and lake to Fort Garry, which they reached on June 10, thirty-eight days out from Montreal.

From Fort Garry a fresh start was made on July 3, on horseback, with baggage sent ahead in lumbering Red River carts. Past Fort Ellice and Fort Carlton, they pushed on with fresh supplies of horses at the topmost speed that the limitations of their convoy of carts would permit. Band after band of Plain



SIR GEORGE SIMPSON

From a print in the John Ross Robertson Collection,
Toronto Public Library

dians, adorned with war-paint and scalp-
ks, crossed their trail, but mosquito and
id-fly proved more troublesome. The tra-
lers passed a band of emigrants making
wly for the Columbia, and everywhere found
ntless herds of buffalo. In three weeks
m Fort Garry they reached Fort Edmonton.
re forty-five fresh horses were in readiness
riding, pack-horses took the place of carts,
l the journey was continued to the south-
st. The Rockies were crossed through
otenay Pass, and at last—after many a halt
find straying horses, and after continuous
noyance from mosquitoes and venomous
ects 'which in size and appearance might
ve been mistaken for a cross between the
ldog and the house-fly'—Fort Colville on
Columbia was reached on August 18.
eir long horseback ride was over. Favoured
wonderfully fine weather, in the saddle
ven to twelve hours a day, they had made
ir way through open prairie and rolling
in, tangled thicket and burning forest and
hing river, and had covered the two thou-
d miles from Fort Garry in six weeks and
days. From Fort Colville they reached
waters of the Pacific at Fort Vancouver
ashington) in another six days. The con-

tinent had been crossed in twelve weeks actual travelling.

Sir George Simpson's journey stood as record for many a year. For a generat after his day the scattered travellers fr Red River westward were compelled to r on saddle-horse and plains cart and can From Montreal and Toronto the railway co be utilized as far as Collingwood, and the the steamer to Port Arthur. Then for a ti the government opened up a summer route the Red River, beginning it in 1869 and ma taining it until 1876. The Dawson route, a was called, included forty-five miles of wag road from Port Arthur to Lake Shebandow then over three hundred miles of water tra with a dozen portages, and again ninety- miles of wagon-road from the Lake of Woods to Fort Garry.[1] In 1870 it took nine five days to transport troops from Toro to Fort Garry over this route. Such ma shifts could not serve for long. South of

[1] 'Lord Strathcona may still remember the man who cam his office at Winnipeg and said: "Look at me; ain't I a he sight? I've come by the government water route from Th Bay, and it's taken me twenty-five days to do it. Durin time I've been half-starved on victuals I wouldn't give a sw Indian. The water used to pour into my bunk at night the boat was so leaky that every bit of baggage I've

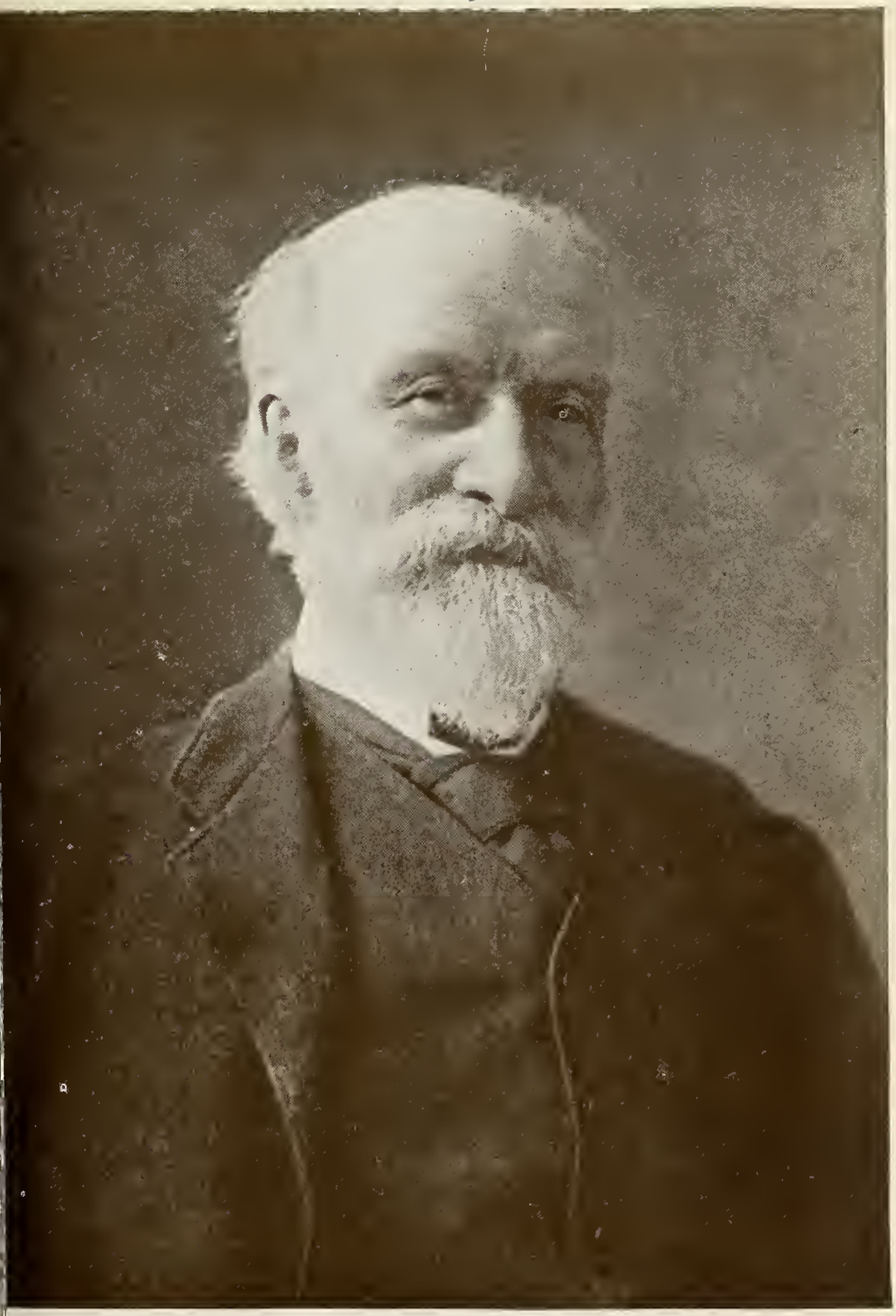
rder the railway was rapidly pushing west-
rd, and in the new nation of the north, as
ll, its time had come.

Ever after the coming of the locomotive, it
eded only imagination and a map to see all
itish North America clamped by an iron
nd. Engineers like Bonnycastle and Synge
d Carmichael-Smyth wrote of the possi-
ty in the forties. Politicians found in the
me matter for admirable after-dinner per-
tions—colonial governors like Harvey in
47, colonial secretaries like Lytton and
rnarvon in the fifties, and colonial premiers
e Joseph Howe, who declared in Halifax in
51: 'I believe that many in this room will
e to hear the whistle of the steam-engine
the passes of the Rocky Mountains, and to
ke the journey from Halifax to the Pacific
ive or six days.' Promoters were not lack-
. In 1851 Allan Macdonnell of Toronto
ght a charter and a subsidy for a road to
Pacific, and the Canadian authorities, in

er-logged and ruined. I've broke my arm and sprained my
e helping to carry half a dozen trunks over a dozen portages,
when I refused to take a paddle on one of the boats, an
wa Irishman told me to go to hell, and said that if I gave
any more of my damned chat he'd let me get off and walk
Winnipeg."'—W. L. Grant in *Geographical Journal,* October
, p. 365.

declining, expressed their opinion that
scheme was not visionary and their hope t
some day Great Britain and the United St
might undertake it jointly. Seven years l
the same promoter secured a charter for
Northwest Transportation, Navigation,
Railway Company, to operate between L
Superior and the Fraser river, but could
no backing; four years previously John Yo
A. N. Morin, A. T. Galt, and John A. P
had petitioned in vain for a similar cha
Then in 1862, on behalf of the Red R
Settlement, Sandford Fleming prepared
elaborate memorial on the subject. Ed
Watkin, of the Grand Trunk, negotiated
the Hudson's Bay Company for right of
and other facilities, but the project proved
vast for his resources.

Two things were needed before dream
paper could become facts in steel—nati
unity and international rivalry. Years be
Confederation, such far-seeing Canadian
William M'Dougall and George Brown
pressed for the annexation of the Br
territories beyond the Lakes. After
federation, all speed was made to buy out
sovereign rights of the Hudson's Bay C
pany. Then came the first Riel Rebellio



SIR SANDFORD FLEMING

From a photograph by Topley

ng home the need of a western road, as the
nt affair had brought home the need of
Intercolonial. The decisive political factor
ne into play in 1870, when British Columbia
ered the federation. Its less than ten
usand white inhabitants—deeming them-
ves citizens of no mean country, and kept
their demands by the urging of an inde-
gable Englishman, Alfred Waddington—
de the construction of an overland railway
indispensable condition of union, and Sir
n Macdonald courageously accepted their
ms.

The other factor, international rivalry,
rcised its influence about the same time.
the United States the railway had rapidly
hed westward, but had halted before the
erts and the mountains lying between the
sissippi and the Pacific. The rivalry of
-slavery and anti-slavery parties in Con-
ss long brought to deadlock all plans of
olic aid to either southern or northern route.
en the Civil War broke the deadlock: the
d of binding the West to the side of the
rth created a strong public demand for a
cific road, and Congress, so stimulated, and
ther lubricated by the payment, as is proven,
at least $476,000 in bribes, gave lavish loans

and grants of land. The Central Paci
working from Sacramento, and the Un
Pacific, starting from Omaha, met near Og
in Utah in 1869—or rather here the rails m
for the rival companies, eager to earn
high subsidy given for mountain constructi
had actually graded two hundred superflu
miles in parallel lines. In 1871 the South
Pacific and the Texas Pacific were fighting
subsidies, and Jay Cooke was promoting
Northern Pacific. The young Dominion
stirred by ambition to emulate its powe
neighbour.

These factors, then, brought the questio
a railway to the Pacific on Canadian soil wi
the range of practical politics. Impor
questions remained to be settled. During
parliamentary session of 1871 the governm
of Sir John Macdonald decided that the
should be built by a company, not by
state, that it should be aided by liberal
sidies in cash and in land, and, to meet Br
Columbia's insistent terms, that it shoul
begun within two, and completed within
years. The Opposition protested that
latter provision was uncalled for and w
bankrupt the Dominion, but the governm
carried its point, though it was forced to h

:r by a stipulation—not included in the nal resolutions—that the annual expendi- e should be such as not to press unduly n the Dominion's resources.

'he first task was to survey the vast wil- ness between the Ottawa valley and the ;ific, and to find, if possible, a feasible route. able an explorer and engineer as Captain liser, appointed by the British government eport upon the country west of the Lakes, l declared in 1863, after four years of care- labour in the field, that, thanks to the ice of the 49th parallel as Canada's ndary, there was no possibility of ever lding a transcontinental railway exclusively ough British territory. The man chosen the task of achieving this impossibility was ndford Fleming. Appointed engineer-in- ef in 1871, he was for nine years in charge of surveys, though for half that time his ies on the Intercolonial absorbed much of energy. Mr Fleming possessed an unusual of literary style, and his reports upon the rk of his staff gave the people of Canada a y clear idea of the difficulties to be en- ntered. His friend, the Rev. George M. ant, who accompanied him in a rapid onnaissance in 1872, gave, in his book

Ocean to Ocean, a vivid and heartening re
cord of the realities and the promise that h
saw.

It had been decided, in order to hold th
balance even between Montreal and Toront
to make the proposed Pacific road begin a
some angle of Lake Nipissing. From th
point nearly to the Red River there stretche
a thousand miles of woodland, rugged an
rock-strewn, covered by a network of countle
lakes and rivers, interspersed with seeming
bottomless swamps or muskegs—a wilderne
which no white man had ever passed throu
from end to end. Then came the level prai
and a great rolling plain rising to the sout
west in three successive steppes, and cut b
deep watercourses. But it was the third
mountain section which presented the mo
serious engineering difficulties. Four hu
dred miles from the Pacific coast, and rough
parallel, ran the towering Rocky Mountai
some of whose peaks rose fifteen thousand fe
Beyond stretched a vast plateau, three
four thousand feet above sea-level, intersect
by rivers which had cut deep chasms or, to t
northward, wide sheltered valleys. Betwe
this plateau and the coast the Cascades int
posed, rivalling the Rockies in height a

Bartholomew, Edin.

ng sheer from the ocean, which thrust in
p fiord channels. At the head of some one
these fiords must be found the western
minus.

Early in the survey a practicable route was
nd throughout. Striking across the wilder-
s from Lake Nipissing to Lake Superior at
river Pic, the line might skirt the shore
the lake to Fort William, or it might run
rtherly through what is now known as the
y belt, with Fort William and the lake
de accessible by a branch. Continuing
stward to the Red River at Selkirk, with
nnipeg on a branch line to the south, the
jected line crossed Lake Manitoba at the
rrows, and then struck out northwesterly,
ough what was then termed the 'Fertile
lt,' till the Yellowhead Pass was reached.
re the Rockies could be easily pierced; but
ce through the engineer was faced by the
ge flanking range of the Cariboo Mountains,
which repeated explorations failed to find a
. But at the foot of the towering barrier
a remarkable deep-set valley four hun-
d miles in length, in which northwestward
the Fraser and southeastward the Canoe
d the Columbia. By following the Fraser
its great southward bend, and then striking

west, a terminus on Bute or Dean Inlet mig be reached, while the valley of the Canoe a the Albreda would give access to the Nor Thompson as far as Kamloops, whence t road might run down the Thompson and t lower Fraser to Burrard Inlet. The lat route, on the whole, was preferred.

While this route was feasible, the mounta portion promised to be extremely expensi This factor, together with the uncertainty government policy and the desire of Victo to have the road built to Bute Inlet a thence, by a bridge across Valdes Strait, carr down to Esquimalt, made it necessary seek untiringly, year after year, for alternat routes. The only important change ma however, until after 1880, was the deflect of the line south of Lake Manitoba to se existing settlements.

Who was to build the road? It would b tremendous task for either the government the private capitalists of a nation of f million people. The United States had begun its Pacific roads till it had over thi millions of people, and wealth and experie to correspond. It was estimated that Canadian road would cost $100,000,000, a it was certain that the engineering difficul

ould be staggering. In Canada few roads
d paid the shareholders, and though some
d profited the contractors, the new enter-
ise meant such a plunge in the dark that
ntractors and promoters alike hesitated.
the United States, however, the Pacific
ads had proved gold-mines for their pro-
oters. The land-grants were valuable, and
e privilege of granting contracts to dummy
nstruction companies controlled by them-
lves and thus reaping larger profits was still
eater.

It was not to be wondered at, therefore,
at the first offer came from American capi-
lists. Alfred Waddington, enthusiast rather
an practical promoter, sought at Ottawa a
harter for the road he had done so much to
cure, but his bill went no further than a
st reading. At Ottawa he was met by
. W. M'Mullen, a Canadian residing in
hicago, who was visiting the Dominion on a
nal deputation. M'Mullen became inter-
ted, and with his Chicago partners endea-
oured to enlist the aid of the men behind the
orthern Pacific—Jay Cooke, General Cass,
. B. Ogden, T. A. Scott, and others.[1]

[1] The Northern Pacific was at many stages in its history
sely connected with Canadian affairs. It had originally been

M'Mullen soon found that Waddington ha exaggerated his influence, and that the govern ment was not yet prepared to discuss terms Sir Francis Hincks, stormy petrel of railwa building, whom Sir John Macdonald had jus made his finance minister, suggested to S Hugh Allan of Montreal that he should ge into touch with these Americans and provid the substantial Canadian interest which wa essential.

Sir Hugh Allan was then the foremost bus ness man in Canada. He was head of th great Allan steamship line, and had becom interested in railways shortly before, whe rumours of the intention of the Grand Trun to establish a rival steamship line to Gre

projected in New England: the first proposal was to use Central Vermont and a Canadian road to be built or acqui as the eastern links, then, crossing into Michigan, the railw was to strike northwestward to the Pacific. When con fell into the hands of New York and Philadelphia interests, th plans were dropped, but later the new management negotia with Governor Archibald of Manitoba, as well as with Sir J Macdonald, to endeavour to put through an international ro the first section running through Canada to Sault Ste Ma the second through Michigan and Minnesota, the third thro the Canadian plains, and the fourth through the Rockies to sea on American territory. Nothing came of the negotiati though it may be noted that the Canadian Pacific to-day carried out precisely this plan, in addition to its all-Canad line.

ritain had led him to assist in promoting the orth Shore from Quebec westward, to com-ete with the Grand Trunk and ensure traffic r his steamers. He now opened negotia-ons with the American capitalists through 'Mullen, came to terms, and then sought ssociates in Canada. Here difficulties arose: ntario objected that Allan's control would ean a Quebec rather than an Ontario rminus, and that the Northern Pacific irectors with whom he was associated were mply conspiring to get control of the anadian road, in order to delay its con-ruction and prevent it becoming a rival to eir own northerly route. Sir George Cartier, o, powerful in the Cabinet and salaried licitor of the Grand Trunk, was a stumbling-lock; he declared himself emphatically pposed to control by any '*sacrée compagnie méricaine.*' But Sir Hugh, believing much money and little in men, resolved to buy is way through. He soon started a backfire Quebec which brought Cartier to terms. ntario rivalry was harder to control: D. L. lacpherson and other Toronto men organized e Interoceanic Railway Company to op-ose Allan's Canada Pacific Company. Both mpanies sought charters and aid. Allan

pretended to drop his American associates; Macpherson charged that the connection still existed. The government endeavoured to bring about an amalgamation, with Allan as president, and, failing this, to organize a new company. In the meantime Allan was spending money so freely that even his New York associates were astounded. The Dominion elections were held in August 1872, and Macdonald, Cartier, and Langevin drew heavily on Allan's funds, $162,500 in all, with a promise from Cartier that 'any amount which you or your Company shall advance for that purpose shall be re-couped to you.' After the election a new company, the Canadian Pacific, was organized, with representative men from each province as directors; and the new board, of its own motion, it was declared elected Allan president. To this company the government granted a charter, promised a subsidy of thirty million dollars and fifty million acres of land, but insisted upon excluding the American interests. Allan acquiesced, and, repaying the advances made, informed New York that negotiations were ended. M'Mullen and his associates, angry at this treatment, conveyed rumours to Opposition leaders, and finally Allan's confidenti

rrespondence, stolen by a clerk in the office J. J. C. Abbott, Allan's solicitor, was made iblic.[1] The fat was in the fire.

With the political controversy which fol-wed we are not here concerned. In Sir hn Macdonald's defence it could be said, at though Allan's money was taken no

This correspondence will be found in the Journals of the use of Commons, vol. vii, 1873. In no other documents ailable to the public has the connection between politics and lway promoting in Canada been made so evident. The follow- are a few brief extracts from letters addressed by Sir Hugh an to various American associates during 1872:

Thinking that as I had taken up the project there must be something very good in it, a very formidable opposition was organized in Toronto, which for want of a better took as their cry 'No foreign influence; no Yankee dictation; no Northern Pacific to choke off our Canadian Pacific,' and others equally sensible. . . . I was forced to drop ostensibly from our organization every American name, and put in reliable people on this side in place of them. . . . Mr M'Mullen was desirous of securing the inferior members of the Government, and entered into engagements of which I did not approve, as I thought it was only a waste of powder and shot. On a calm view of the situation I satisfied myself that the decision of the question must ultimately be in the hands of one man, and that man was Sir George E. Cartier, the leader of the French party, which held the balance of power between the other factions. . . . It was evident that some means must be adopted to bring the influence of this compact body of men to bear in our favour, and as soon as I made up my mind what to do, I did not lose a moment in following it up. A railroad from Montreal to Ottawa, through the French country, north of the Ottawa river, has

special favours were shown in the contrac made; and that all that Allan secured by th government's victory was the certainty tha the railway project would not be postponed o dropped altogether, and that he would b given control. Sir Hugh Allan had said wit much force: 'The plans I propose are i themselves the best for the interests of th Dominion, and in urging them on the publi I am really doing a most patriotic action Undoubtedly Sir John Macdonald sincerel held a similar opinion.

> long been desired by the French inhabitants; but Cartie who is a salaried solicitor of the Grand Trunk road, to whi this would be an opposition, has interposed difficulties, a by his influence prevented it being built. . . . The plans propose are in themselves the best for the interests of t Dominion, and in urging them on the public I am rea doing a most patriotic action. But even in that view, mea must be used to influence the public, and I employed seve young French lawyers to write it up in their own new papers. I subscribed a controlling influence in the sto and proceeded to subsidize the newspapers themselves, b editors and proprietors. I went to the country throu which the road would pass, and called on many of the habitants. I visited the priests and made friends of the and I employed agents to go among the principal peo and talk it up. I then began to hold public meetings, a attended to them myself, making frequent speeches in Fre to them, showing them where their true interests lay . . . I formed a committee to influence the members of the Leg lature. This succeeded so well that in a short time it 27 out of 45 on whom I could rely, and the electors of

The Allan Company gave up its charter, able to raise capital in face of finan- l depression and political upheaval. The beral party, led by Alexander Mackenzie, d swept into power by a wave of popular dignation, first endeavoured to induce other pitalists to take up the work. But the vernment's offers of $10,000 in cash and of ,000 acres of land for each mile, plus an determined guarantee, had no takers in the ars of depression that followed. Macken- then decided that the government should

ward in this city, which Cartier himself represents, notified him that unless the contract for the Pacific Railway was given in the interests of Lower Canada he need not present himself for re-election. . . .

The policy adopted has been quite successful, the strong French influence I succeeded in obtaining has proved sufficient to control the elections, and as soon as the Government realized this fact, which they were unwilling to admit and slow to see, they opened negotiations with me. . . . Yesterday we entered into an agreement, by which the Government bound itself to form a Company of Canadians, only according to my wishes. That this Company will make me President, and that I and my friends will get a majority of the stock, and that the contract for building the railroad will be given to this Company, in terms of the Act of Parliament. Americans are to be carefully excluded in the fear that they will sell it to the Union [*sic*] Pacific, but I fancy we can get over that some way or other. This position has not been attained without large payments of money. I have already paid over $200,000, and will have at least $100,000 more to pay.

itself build the road. He planned to build a
first only the indispensable sections, using th
waterways wherever possible, and hoped, bu
in vain, to secure British Columbia's consen
to an extension of the time set for completio
His first step was to subsidize the Canad
Central, which ran from Ottawa via Carleto
Place to Pembroke, to extend its line as fa
as Lake Nipissing, in order to connect with th
proposed eastern terminus of the Pacific roa
and to award a contract (it was afterwar
cancelled) for a branch from this junctio
point to Georgian Bay. Passing by for t
time the country north of Lake Superior,
next let contracts for the greater part of t
distance between Fort William and Selki
and for a road from Selkirk to Emerson,
the Manitoba border. Here connection w
to be made with an American line, the
Paul and Pacific, of which more will be hea
presently.

When Mackenzie left office in 1878 t
work of location or construction was well a
vanced in all three sections. For two yea
the new administration of Sir John Macdona
carried on the same policy of government co
struction at a moderate pace. The work
hand was continued and the gaps in the ro

ween Port Arthur and Selkirk were put
er contract. The line was made to pass
ough Winnipeg—instead of striking west
n Selkirk, as the engineers had previously
ised, and thus side-tracking the ambitious
growing up around old Fort Garry. Con-
ts were let for two hundred miles of the
nsion westward from Winnipeg. Two
ons passed before the new government
d make up its mind as to the British
mbia section. Late in 1879 it decided
dhere to the route chosen under the Mac-
zie administration, through the Yellowhead
s, down the Thompson and the Fraser to
t Moody on Burrard Inlet. The difficult
ion from Yale, the head of navigation on
Fraser, to Savona's Ferry, near Kamloops,
shortly afterwards placed under contract.
he ten years' time allotted for the construc-
of the Canadian Pacific was nearly gone
there was little completed work to show.
d times, depression in the railway world,
nges of government and political upheavals,
utes as to route and terminus, had delayed
struction. The building of the link north
Lake Superior, necessary for all-rail con-
ion between East and West on Canadian
itory, had been indefinitely postponed.

Something had been done, it is true. Ma
toba was being linked up with the East by
road south to Minnesota and by another li
to the head of Lake Superior, and a start h
been made in British Columbia. Some d
under some administration, the gaps would
filled up and the promise to British Colum
would be redeemed.

Suddenly, in June 1880, Sir John M
donald, speaking at Bath, made the announ
ment that a group of capitalists had offe
to build the road, on terms which would ens
that in the end it would not cost Canad
single farthing. Four months later a contr
was signed in Ottawa by which the Canad
Pacific Syndicate undertook to build
operate the whole road. An entirely new t
had been given to the situation, and the m
important chapter in Canada's railway ann
if not in her national life, had been begun.

Bartholomew, Edin.r

CHAPTER VIII

BUILDING THE CANADIAN PACIFIC

he months and years that followed, no men
e so much in the mind and speech of the
adian public as the members of the new
dicate. The leading members were a re-
kable group of men. Probably never in
history of railway building, not even in the
of the ' Big Four ' who built the Central
fic—Huntingdon, Stanford, Crocker, and
kins—had the call of the railway brought
ther in a single enterprise men of such out-
ding individuality, of such ability and per-
nce, and destined for success so notable.
he Canadian Pacific was not their first
t enterprise. It was the direct outcome
daring venture in connection with a bank-
Minnesota railway, which had brought
n wealth beyond their wildest dreams, and
definitely turned their thoughts to railway
s.
arly in the settlement of the northwestern

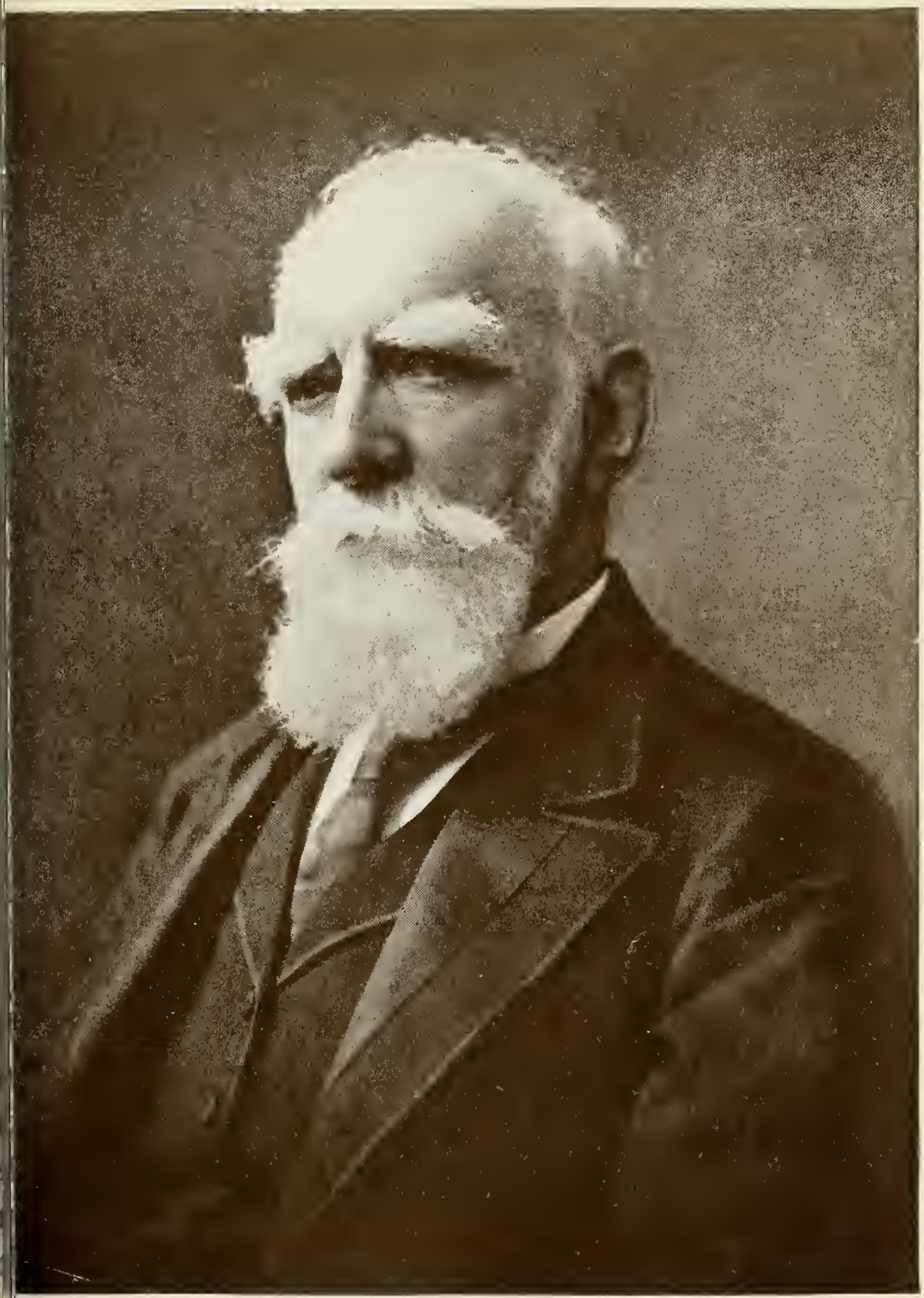
states the need of railways, and of state aid t
railways, was widely realized. In 1857 Co
gress gave the territory of Minnesota a lar
grant of public lands to use in bonusing ra
way building, and in the same year the legi
lature of the territory incorporated a compan
the Minnesota and Pacific, to build from Sti
water through St Paul and St Anthony's Fa
(Minneapolis) to Red River points. The sta
gave the new company millions of acres
land and a cash subsidy, municipalities offer
bonuses, and a small amount of stock was su
scribed locally. Five years passed, and
a mile had been completed. The compa
looted into insolvency by fraudulent constr
tion company contracts, was reorganized
the St Paul and Pacific, heir to the old co
pany's assets but not to its liabilities, an
beginning was made once more. Trust
Dutch bondholders lent over twenty millio
and by 1871 the road reached Breckenri
on the Red River, two hundred and sevent
miles from St Paul. Again a halt ca
Russell Sage and his associates in control
once more looted the treasury. The Du
bondholders, through their agent, John
Kennedy, a New York banker, applied fo
receiver, and in 1873 one Jesse P. Farley

pointed by the court. It seemed that the ry settlers might whistle in vain for their d.

n St Paul at that time there lived two adians who saw the opportunity. The r, Norman W. Kittson, had been Hudson agent and head of a transportation com- y on the Red River. The younger, James Hill, an Ontario farm-boy who had gone t while still in his teens, owned a coal and d yard in St Paul, and had a share in the sportation company. Neither had the tal or the financial connection required to hold of the bankrupt company, but they on thinking of it day and night. Soon hird man joined their ranks, Donald A. th. A Highland lad who had come to ada at eighteen, Donald Smith had spent eneration in the service of the Hudson's Company, mainly in the dreary wilds of rador and on the shores of Hudson Bay. en in 1871 he became chief commissioner he organization he had served so long and vell, it seemed to most men that he was nitely settled in his life work and probably the height of his career. But Fate knew, Donald Smith knew, that his career was beginning. Coming down from the north

each year by the Red River to St Paul, on
way east, he talked over the railway situ
tion with Hill and Kittson. The more th
talked the greater grew their faith in the cou
try and the railroad. It was a faith, howev
that few in the moneyed East shared w
them. It had been the smashing of the ri
road, the Northern Pacific, in 1873, that h
given the signal for the brief panic and
long depression of the seventies. The Min
sota road itself had twice become bankru
The legislature would undoubtedly soon
clare the land-grant forfeited, unless the c
struction promised was completed. To fill
cup, in the middle seventies Minnesota
the neighbouring lands were visited by
precedented swarms of grasshoppers or Ro
Mountain locusts. Swarming down from
plateau lands of the Rockies in columns m
high, covering the ground from horizon
horizon, they swept resistlessly forward,
vouring every green thing in their way. W
they had passed, hundreds of deserted sha
stood silent witnesses to the settlers' desp

It was in 1876 that the further allies nee
came from the East. Thirty years ea
George Stephen, a younger cousin of Do
Smith, had left his Highland hills to seek



LORD STRATHCONA

From a photograph by Lafayette, London

rtune in London, and after a short appren-
ceship there had gone still farther afield,
ining an uncle in Montreal. He rose rapidly
a foremost place in the wholesale trade of
ontreal; selling led him into manufacturing,
nd manufacturing into financial activities.
1876 he became president of the Bank of
ontreal. Associated with him in the same
ank was still another shrewd, forth-faring
cot, Richard B. Angus, who had risen steadily
its service until appointed to succeed E. H.
ing as general manager in 1869.

A lawsuit in connection with the bank's
fairs took both Stephen and Angus to
hicago in 1876. A week's adjournment left
em with unwonted leisure. A toss of a coin
nt them to St Paul rather than to St Louis
spend the week. Smith had already spoken
the project while in Montreal, but at that
istance caution had prevailed. Now Stephen,
ho had never before seen the prairie, was
nmensely taken with the rich, deep soil he
w before him. He knew from reading and
xperience that grasshopper plagues did not
st for ever. He decided, therefore, to join
the attempt to get control of the Minnesota
ad and its land-grant, and the famous group
as complete.

Once George Stephen had made up his mind little time was ever lost. He sailed for Europ and interviewed the Amsterdam committee i charge of the Dutch bondholders' interest Messrs Chouet, Weetjin and Kirkhoven. The despaired of ever seeing their money back, an were weary of being assessed by the receive for funds to keep the road together. Stephe left Amsterdam with an option in his pocke given for the sum of one guilder, agreeing t sell him the Dutch bonds for something lik the amount of the unpaid interest, and agree ing, further, to wait until six months after re organization for part of the payment. Th next step was to provide the cash required fo immediate necessities. About $300,000 wa put up by the members of the group.[1] Mone was borrowed from the Bank of Montrea $280,000 in the first advance, and somethin under $700,000 in all, as Stephen stated t inquiring shareholders at the bank's annu meeting in 1880. Money was advanced t the receiver to complete the most necessar extensions, those required to save the lan grant and that necessary to reach the Canadia

[1] Stephen, Smith, Hill, and Kennedy each took one share, a Kittson half a share; and later Angus, after leaving the servi of the bank to go with the railway, took the remaining half-sha

rder to join the government road being built uth from Winnipeg. The threatened for- iture of the land-grant was thus averted for time. Then the bonds were purchased for ,780,000, the floating obligations and part the stock were bought up, and the mort- ge which secured the bonds was foreclosed. ıe assets were bought by the new company ganized for the purpose, the St Paul, Minnea- lis and Manitoba, of which George Stephen ıs president, R. B. Angus vice-president, and mes J. Hill general manager. Thus in June 79 the whole system, comprising six hundred d sixty-seven miles of railway, of which five ndred and sixty-five were completed, and e land-grant of two and a half million acres, me into the possession of the little group.[1] The after fortunes of the road, which ten ars later expanded into the Great Northern to-day, do not concern us here. It is only cessary to recount that the harvest reaped

[1] Not all were willing to attribute to courage and luck alone full success of this stroke. Some Dutch bondholders, inde- dently of the committee, asserted that Kennedy had not played , and Farley, the receiver of the road, sued Hill for a share of profits which he alleged had been promised for his collusion. repeated trials Farley was unable to produce evidence satis- ory to the courts, which held that in any case his claim must ejected because 'based on inherent turpitude.'

by the adventurers [1] put the tales of El Dorad to shame. A few days after control of th railway had been assured, the grasshoppe had risen in flight, and Minnesota knew the no more. Settlers swarmed in, the railroa platforms were jammed with land-seekers, a between the land-buyers of to-day and t wheat-shippers of to-morrow the owners of t once discredited railway saw their coffers f to overflowing. In 1879 they divided amo themselves the whole fifteen millions of sto issued, floating sixteen millions of bonds f extension and equipment. For three yea they took no dividends, letting the profits to further building. Then in 1882 anoth $2,000,000 stock was issued, and in 1883 deferred dividend came in the shape of $9,000,000 issue of bonds, or, rather, the sto holders sold to themselves a $10,000,000 iss for ten cents on the dollar. Aside entire from interest and dividends, the stockhold of the Great Northern in the seventeen ye following 1889 were presented with o $300,000,000 of interest-bearing securiti

[1] 'Most men who have really lived have had, in some sh their great adventure. This railway is mine' (James J. Hi Valedictory to the Shareholders of the Great Northern, Jul 1912).

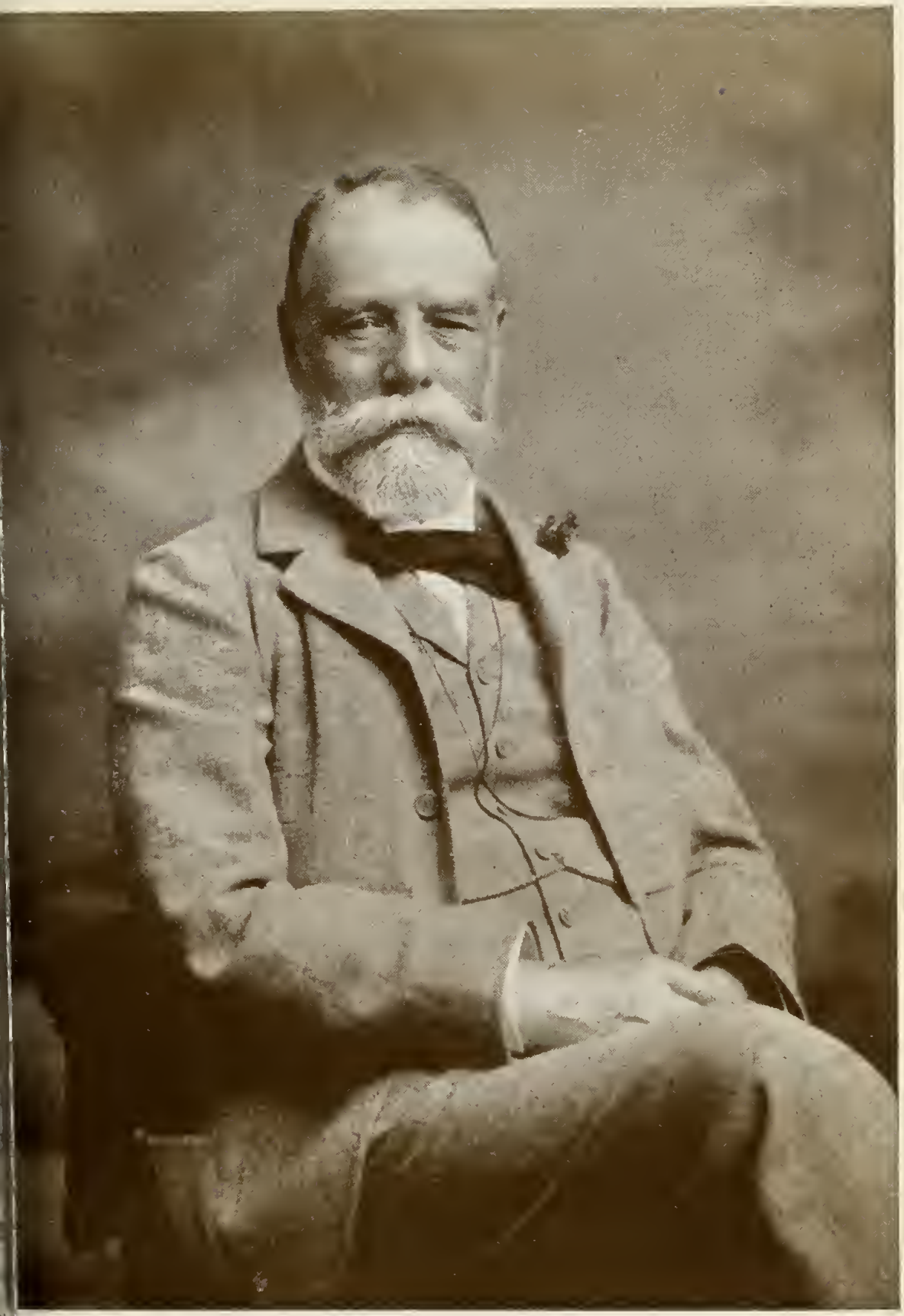
ll the railway annals of the United States annot present a duplicate of the startling uccess attained by these four or five Canadians nd their associates.[1]

These were the men to whom the Canadian overnment turned when the minister of Rail-ays, Sir Charles Tupper, urged them to un-oad upon a private company the burden of ompleting the road to the Pacific. 'Catch hem before they invest their profits,' was the dvice of Sir John's most intimate adviser, hat shrewd Eastern Townships politician, ohn Henry Pope. Probably they came half-ay. They knew the West as well as any ien, and with their road built to the Canadian oundary and with a traffic arrangement eyond to Winnipeg, they were already in the eld. Of all the group Stephen was most re-uctant to undertake the new enterprise, but e was assured by his associates that the urdens of management would be shared by ll. The government had also approached)uncan M'Intyre, a Montreal capitalist who ontrolled the Canada Central, running from Brockville by way of Ottawa to Pembroke,

[1] It was from their St Paul investment that the leading men in ie group secured the basis and the bulk of their great fortunes; ie Canadian Pacific added little to their coffers.

and under construction from that point to Callender, the eastern end of the Canadian Pacific main line. He was more than willing to link up this railway with the larger project, and the group was formed.

They debated the question with the government early in 1880. It was felt, however, that negotiations could not be concluded in Canada. More capital would be needed than even these new-fledged millionaires could or would furnish, and nowhere was capital so abundant as in London. In July, therefore, Sir John Macdonald, Sir Charles Tupper, and John Henry Pope sailed for London, accompanied by George Stephen and Duncan M'Intyre. London capitalists did not bite as freely as anticipated. Barings and Rothschilds alike were chary about the enterprise. Sir Henry Tyler, president of the Grand Trunk, was approached and agreed to build if the link north of Lake Superior were omitted in favour of a line through the United States, south of the lakes, a condition which Sir John, strongly urged on by Tupper, would not accept. An arrangement might have been made with a London group, but only on condition of a four per cent guarantee for twelve years, another condition which, less wisely, was also rejected. In the



LORD MOUNT STEPHEN

From a photograph by Wood and Henry, Dufftown
By courtesy of Sir William Van Horne

nd the quest proved unavailing. It is true hat the Paris firm of Cohen, Reinach and Co. entered the syndicate, and that the London house of Morton, Rose and Co. lso joined. It was really, however, the New York end of that firm, Morton, Bliss and Co., which was interested. Contrary to the eneral impression, the fact is, that though nost of the shares when issued eventually drifted into English hands, no English finan-iers shared in the building of the Canadian Pacific until it was within one hundred days f completion. Perhaps, in view of the Grand Trunk's record, it was as well that the men on his side of the Atlantic were to be thrown on heir own resources from the start, and given the hance for bigness which responsibility brings.

Back to Ottawa the pilgrims came, and here on October 21, 1880, the contract was igned by Charles Tupper for the government nd by George Stephen, Duncan M'Intyre, ames J. Hill, John S. Kennedy, Morton, Rose nd Co. of London, and Cohen, Reinach and Co. of Paris. Donald A. Smith's name was ot there. It was only two years since he and ir John, on the floor of the House of Commons, ad called each other 'liar' and 'coward' nd any other sufficiently strong epithet they

could put their tongues to, and it was to be a few years more before the two Highlanders could cover their private feud with a coating of elaborate cordiality. So, to preserve appearances, Smith's interest was kept a secret—but a very open one.

When parliament met in December 1880 the contract was laid before it. The terms were princely. For constructing some nineteen hundred miles the syndicate were to be given free and complete the seven hundred and ten miles under construction by the government, $25,000,000 in cash, and 25,000,000 acres of selected land in the Fertile Belt. They were promised exemptions from import duties on construction materials, from taxes on land for twenty years after the patents were issued and on stock and other property for ever, and exemption from regulation of rates until ten per cent per annum was earned on the capital. Assurance was given that for twenty years no competitive roads connecting with the western states would be chartered: 'no line of railway south of the Canadian Pacific, except such line as shall run southwest or to the westward of southwest, nor to be within fifteen miles

[1] Including the Yale-Port Moody section, not yet formally under contract.

latitude 49°.' Ten years were given to mplete the task, and a million dollars were posited as security.

The contract was received by Blake, then ader of the Opposition, and his followers ith a unanimous shout of disapproval. Dur- g the Christmas recess Blake endeavoured raise the country against it. A rival ndicate was hastily organized, with Sir illiam Howland, A. R. M'Master, William endrie, A. T. Wood, Allan Gilmour, George Cox, P. Larkin, James M'Laren, Alexander bson, and other well-known capitalists its head. After depositing $1,400,000 in artered banks as evidence of good faith, ey offered to build the road for $3,000,000 d 3,000,000 acres less, to pay duty on all pplies imported, and to abandon the mono- ly clause, the exemptions from taxation, d the exemption from rate regulation. With is weapon to brandish Blake gave the govern- ent proposal no respite, but on a straight rty vote the contract was ratified by parlia- ent and received the formal royal assent in bruary 1881.

It was in many ways unfortunate that from e outset the Canadian Pacific project was ade the football of party politics, but it was

perhaps inevitable. The first duty of an Oppo
sition is to oppose, and even if some goo
measures are factitiously resisted, many a 'job
is prevented by this relentless criticism. Th
government proposal, it would now seem, wa
on the whole in the country's interest, bu
it had weak points. In attacking these th
Opposition was led on to take up a positio
of hostility to the whole project, while th
government was equally indiscriminate in de
fending every jot and tittle of the bargain. I
any event, with the bitter rivalry of the Gran
Trunk and the Canadian Pacific looming up
it is doubtful if it could have been possible t
prevent this antagonism being reflected in th
politics of a country where the issues are s
largely economic issues.

That the government was right in decidi
for private construction and operation, the
has since been little question. To build an
operate a pioneer road, to make the inevitab
United States connections or extensions,
undertake the subsidiary enterprises and
enter into the flexible, intimate relations wi
producers and shippers necessary for succes
were tasks for which government departmen
were not well fitted. With the traditio
which has unfortunately become establish

Canadian politics, there would probably be
npaign contributions in the one case and
ift in the other, but in the one case, also,
ere would probably be efficiency, and in the
ier red tape and stagnation.

As to what private company should be given
contract, there seemed more room for dis-
sion. The members of the Howland syndi-
e were successful and substantial business
n, and their offer appeared to be much better
n the offer accepted. It was, however,
nounced as a sham by the government forces,
the ground that its signers knew that there
s not the faintest likelihood of the ministry
ing to carry through the contract it had
ned. How successful the Howland group
uld have proved we can only conjecture;
s certainly not likely that they would have
veloped more courage, persistence, or enter-
se than the men who actually carried out
project; nor could they have fulfilled their
igations more fully and more honourably.

The parties differed, again, on the question
the Lake Superior link. The government
ed the necessity of building at once an all-
nadian route, regardless of the added ex-
se. The Opposition favoured such a route
ntually, but urged that it was better for the

present to make use of a road running fro
the Sault through Northern Michigan and Mi
nesota. Such a road would bring to Montre
the traffic of the American as well as t
Canadian West. Then, when our West ha
been settled and traffic warranted, the tas
of cutting a road through the wilderness nor
of the lake could be faced, and meantime
would not be necessary to offer any compa
the extravagant terms necessary to induce
to assume this burden from the start. The
was much weight in this argument, which S
Charles Tupper himself had strongly urg
only a few months before, and in the light
the later Canadian Pacific extension throu
precisely this American territory as well
through Maine, there was much buncombe
the flag-waving answer made. Yet, on t
whole, so necessary to national unity was
unbroken road, so hard a country was this
make into one, that it was best to err on t
side of safety. The political interests at sta
warranted some risk of money loss.

It was, however, on the question of t
form and amount of the aid offered that m
controversy arose. Sir John Macdonald h
lightly prophesied that in the end the ro
would not cost Canada a single farthing.

ubtless meant that land sales would repay
e expenditure ; even this did not prove true,
d the statement awoke unreasonable expec-
ions as to the bargain to be made. When
e contract was made public it was denounced
meaning nothing more or less than that
e country was to build the road and present
gratis to the company. To anticipate a few
ars, we may note the actual results at the
d of 1885, when the last rail had been laid.
e cost of the main line only, including the
vernment sections, and of equipment, to
at date, was approximately $150,000,000.
om private sources some $50,000,000 net
d been secured : the $65,000,000 stock had
en sold at varying prices, realizing slightly
er $30,000,000 for the treasury, and first
rtgage bonds, land-grant bonds less amount
eemed, and outstanding accounts made
the balance. The government, on its
t, had given, by the final arrangements,
,000,000 cash, and completed road costing
other $35,000,000 ; three and a half million
es of the land-grant had been sold for about
,000,000, and at only two dollars per acre
fourteen odd million acres left were worth
r $29,000,000.

On the other hand, it was urged that the aid

given was not so great as it seemed. T
value of the government sections was pa
ticularly questioned.[1] Whatever its value,
was not more than enough to induce capitali
to run the great risks involved. The road h
to be operated as well as built, and few believ
that for years to come there would be su
cient traffic to make ends meet. Its futu
depended on the future of the West, and
needed a robust optimism at times to beli
that the West would overcome frost a
drought and other plagues. The fact that
1885 Canadian Pacific stock sold as low as
in London, and a shade lower on this side of
water, shows the estimate the world of fina
put upon the bargain it had made. Nor
the road completed in 1886. It was then o
begun. Grades had to be bettered, tres
work filled up, extensions flung out, termi
secured, and a new road built every
years.

[1] Giving evidence before the Senate Committee on Inte
Commerce in New York in 1889, President Van Horne s
that the company was obliged to abandon part of the surve
which the government had spent millions, and make new
that the government sections were unwisely located, espe
in British Columbia; that the cost of the remainder was incr
by having to join it to the unwisely located sections, and
allowing for the saving which could have been made in loc
he could have duplicated the latter for twelve or fifteen mill

SIR WILLIAM CORNELIUS VAN HORNE

From a photograph by Notman

Looking back now, after the lapse of thirty ars, it would seem that the government uld have done better if it had given less of land which was to prove so valuable, and d, instead, guaranteed the dividend on the ck for a term of years. In the eighties, wever, western acres were held in little eem and money guarantees, with Grand unk memories fresh, looked dangerous—and vas in the eighties that the decision had to made.

More valid was the criticism of the remain- terms. The exemption from duties was e, if inconsistent in a protectionist govern- nt, and the exemption from regulation of es until ten per cent was earned had a pre- lent in a clause in the General Railway Act, repealed until 1888, exempting all roads m such regulation until fifteen per cent on capital invested had been earned. The emption from taxation, however, was an un- rranted privilege, throwing undue burdens homesteading settlers; and the interpre- ion afterwards given that the exemption on ds extended until twenty years after the tent had been issued still further increased difficulty. Objectionable, also, was the nopoly clause, barring United States con-

nections for ten years. It was claimed th this exemption was essential if traffic was be secured for the Lake Superior link, a essential also if capital was to be secured fr England. The Englishman, one of the hea of the road declared, hated a monopoly home as he hated the devil, but he looked w favour on monopolies abroad. The monop clause, as will be seen later, for a time more to split East and West than the La Superior link did to bind them together spirit.

But enough of discussion. Action ca quick. Not a day was lost in organizing a beginning work.

George Stephen was chosen president, a held the post until 1888. To him more th to any other man the ultimate success the Canadian Pacific was due. Indomita persistence, unquenchable faith, unyield honour stamped his character. He was of the greatest of Empire builders. He ne despaired in the tightest corner, and ne rested while a single expedient remained tried. Duncan M'Intyre became one of two vice-presidents, and took an active p in the company's affairs until he dropped

1884. Richard B. Angus came back from Paul to become vice-president and a member the executive committee. His long bank-g experience and his shrewd, straightforward dgment proved a tower of strength in days trial.

Donald A. Smith, while after 1883 a director nd a member of the executive committee, ook little part in the railway's affairs, though Stephen's urging he more than once joined going security when help was most needed. ames J. Hill left the directorate and un-aded his stock at the close of 1882, because ne company refused to accept his advice to mit the Lake Superior section, and because the growing divergence of interests between ne St Paul, Minneapolis and Manitoba and ne Canadian Pacific. With him retired John . Kennedy. The Baron de Reinach also ithdrew at an early stage. The English irectors, representing Morton, Rose and Co. f London, retired as soon as the road was ompleted, being replaced by representatives f Morton, Bliss and Co. of New York. E. B. sler came in with the Ontario and Quebec in 884. The board became more and more dis-nctively Canadian.

One of the first steps taken by the directors

was to open offices in Winnipeg, and put tw men with United States experience in charg —A. B. Stickney, later president of the Chicag Great Western, as general superintendent, an General Rosser as chief engineer. The rat of progress was not satisfactory, and early i 1882 a fortunate change was made. Willia C. Van Horne, at that time general superi tendent of the Chicago, Milwaukee and S Paul, and still under forty, was appointe general manager with wide powers. Som years earlier, when he was president of th Southern Minnesota, the leading members the St Paul syndicate had had an opportunit of learning his skill. He had been in rai roading since fourteen, beginning as a telegrap operator on the Illinois Central, and had rise rapidly in the service of one Middle West roa after another. His tireless driving force wa precisely the asset the company now mo needed.

The first task was to find the money nece sary to build the nineteen hundred miles r maining of the main line, to build or acqui necessary branches and extensions, and to pr vide equipment.

The government subsidies were the fir

source. The $25,000,000 cash and the
5,000,000-acre land-grant were to be paid
s construction advanced. If the land-grant
ere put on the market at once, for sale to
ttlers, it would bring relatively little, in face
the competition of the free homestead land
adjoining sections. Three expedients were
evised to make it available as soon as pos-
ble. An extensive campaign was begun to
lvertise the government free land and thus
haust the supply along the railway line, and
the same time provide producers of freight.
onds based on the security of the land-grant
ere issued to the amount of $25,000,000;
0,000,000 of this issue was sold in 1881 at
, and varying proportions of the remainder
ere used as pledge for the government loans
execution of the contract. These bonds
ere redeemed and cancelled as the lands on
hich they were based were sold. Further,
e Canada North-West Land Company was
ganized to buy five million acres for a long
ld. The company included several members
the syndicate as well as some English in-
stors to whom land appealed more than rail-
y stocks. It found itself unable to handle
s amount and the purchase was reduced
2,200,000 acres. Sales to other companies

and to individuals brought the total amou
received or due from land by the end of 188
up to $11,000,000.

Next came the contributions of the membe
of the syndicate and other private investor
The capital stock authorized was $100,000,00
In 1881 the members of the syndicate su
scribed $5,000,000 at par. In May 1882 th
allotted themselves $10,000,000 at 25.
December of the same year $30,000,000 w
issued at 52½ to a syndicate of New Yo
bankers organized by W. L. Scott; this sto
was eventually sold largely in Holland and
England. A final ten millions were pledg
in New York and Montreal for a loan of h
that sum, and later sold for about the amou
of the loan. All told, sixty-five millions
stock had been issued and some thirty-o
million dollars had been brought into t
treasury.

Then the flow ceased. The brief gleam
prosperity which had shone over No
America after the gloom of the later seven
vanished. Never had railway building b
carried on so vigorously in the United Sta
as in the years 1881-83, and the react
was correspondingly severe. The collapse
the boom which had accompanied the

perations in Manitoba, the failure of harvest after harvest, the fading away of settlers and speculators alike, robbed all but a persistent ew of faith in the Canadian North-West and n the railway whose fortunes rose or fell with t. The way of the Canadian Pacific was nade particularly hard by the manœuvres of ival companies. Some of the United States Pacific roads, awake to the seriousness of the ompetition threatened, attacked it in the New York market. The Grand Trunk, naturlly alarmed by the incursion of the new road nto its best paying territory in the East, used ll the power of its influential directors and s army of shareholders in England to bar the London market.

The financial policy adopted by the Canadian Pacific was unique in the records of great railway enterprises on this continent. It was imply to rely entirely on stock issues, to enleavour to build the road without incurring ny bonded debt. Not until the last year of onstruction, 1885, were bonds based upon he security of the road itself issued for sale. t was doubtless desirable, if possible, to avoid he reckless methods by which so many Amerian roads had been hopelessly waterlogged by xcessive bond issues. The memory of the

St Paul and Pacific's six-million share capital as against its twenty-eight-million bonded indebtedness was fresh in the minds of the members of the syndicate. By keeping fixed charges low, while earning power was still uncertain, they lessened the risk of having the road pass out of the stockholders' control into a receiver's hands. Yet as bonds could have been sold more easily than stock, it increased the difficulty of finding the necessary capital. Even so, it came within an ace of succeeding.

In pursuance of this policy the management, faced with a hesitating market, decided upon a bold step. Late in 1883, acting in accordance with the advice of New York and London financiers, they decided to endeavour to make a market for the unissued stock by giving assurance of a dividend for a term of years. They offered to deposit with the government as trustees a sum sufficient to provide for ten years a dividend of three per cent on the $65,000,000 stock already issued, to be supplemented, if possible, by a further dividend out of current revenues, and they arranged to make similar provision for the remaining $35,000,000 as it was sold. Over half the $16,000,000 necessary to purchase the

nnuity was deposited with the government t once and security given for the early payment of the balance. Only success could have ustified such a locking up of the funds urgently eeded for construction, and success did not ome, though for a time it seemed probable. he sudden smash of the Northern Pacific, ust completed by Villard, brought the stock own lower than before the fillip had been iven. With sixteen millions locked up or ledged the company was in a worse state than efore.[1]

In this emergency Stephen and Smith and I'Intyre pledged their St Paul or other stock r loans in New York and Montreal, but still he gap was unfilled. They turned to the

[1] 'The payment to the government of $8,710,240, in advance, secured dividends, has deprived the company for the moment the means for continuous, vigorous exertion in construction, ithout enabling it to recoup itself by the sale of its stock, as as confidently and reasonably expected' (Letter of George tephen to the government, January 15, 1884).

Speaking in parliament in 1885, Edward Blake declared that, nitting the last ten millions issued, the company had raised on ock $24,500,000, and, counting the next two dividend payments, ey would have paid or provided for dividends $24,875,000. ready $7,000,000 had been paid out in dividends, members of e syndicate receiving $3,610,000 on their $10,000,000 investment. other words, before the road was opened for traffic, every cent id in by the shareholders would have been paid back or set ide for dividends, leaving not a dollar for building the road.

government, requesting a loan of $22,500,000, to be secured by a first charge on the main line. In return, they agreed to complete the road by May 1886, five years earlier than the contract required. The request at first was scouted by Sir John Macdonald. Parliament would not consent, and if parliament consented the country would revolt. Bankruptcy stared the company in the face when John Henry Pope came to the rescue. He soon convinced Sir John that if the Canadian Pacific smashed the Conservative party would smash the day after, and the aid was promised. The Cabinet was won over, and Sir Charles Tupper, hastily summoned by cable from London, stormed it through caucus, and the loan was made.

The funds thus secured were soon exhausted in rapid and costly construction in the mountain and Lake Superior sections. The government's blanket mortgage on the road made it impossible to borrow elsewhere. So, after the Riel episode, to be noted later, a new arrangement was made with the government by which the $35,000,000 stock unsold was cancelled and an equal amount of first mortgage bonds issued. Twenty millions of this issue and the unsold lands were substituted for the government's security, and the remainder of the bonds

ld at 95. This put the company once more
funds. The relief came none too soon. In
ne fateful day in July, when the final passing
the bill was being tensely awaited, the
anadian Pacific, which now borrows fifty
illions any day before breakfast, was within
ree hours of bankruptcy for lack of a few
ndred thousand dollars. But by March
86 every cent of the company's obligations
the government was paid off, twenty millions
cash and the remainder in land at $1.50 an
re.

The men behind the Canadian Pacific proved
emselves possessed of courage and deter-
ination such as will always win them honour.
t more than one critical stage they staked
eir all to keep the work going. But the
ct remains that the bulk of the resources
ilized in the original building of the road
ere provided or advanced by the people of
nada. The Canadian Pacific is as truly a
onument of public as of private faith.

Meanwhile, the work of construction had
en going ahead. Under William Van Horne's
asterful methods the leisurely pace of govern-
ent construction quickened into the most
pid achievement on record. A time-schedule,

carefully made out in advance, was adhere to with remarkably little variation.

Work was begun at the east end of the lin from the point of junction with the Canad Central, but at first energy was devoted chief to the portion crossing the plains. Importa changes in route were made. The main li had already been deflected to pass throug Winnipeg. Now a much more southerly li across the plains was adopted, making for Ca gary rather than Edmonton. The new rou was shorter by a hundred miles, and mo likely to prevent the construction of a riv road south of it later. For many years aft the Palliser-Dawson-Hinds reports of the la fifties, it had been assumed that the tillab lands of the West lay in a 'Fertile Belt' rainbow, following roughly the Saskatchew valley and curving round a big wedge of t American desert projecting north. Certain the short, withered, russet-coloured grass lan of the border country looked forbidding bes the green herbage of the North Saskatchewa But in 1879 Professor Macoun's investigatio had shown that the southern lands had be belied by rumour, and that only a very sm section was hopelessly arid. With this obj tion removed, the only drawback to

uthern route was the difficulty of finding as od a route through the mountains as the rtherly Yellowhead Pass route afforded, but this the company decided to take its ances.

Work on the plains was begun in May 1881, d by the end of the year 161 miles had en completed. This progress was counted o slow, and under Van Horne's manage- ent a contract was made in 1882, with ngdon and Shepard of St Paul, to complete e line to Calgary. Later in the year a con- uction company was organized, the North nerican Railway Contracting Company, to ild all the uncompleted sections of the main e for $32,000,000 cash and $45,000,000 mmon stock. This was really a financing ther than a construction expedient, and was andoned within a year.

In this section the engineering difficulties re not serious, but the pace of construction ich was demanded, and the fact that every ck of timber and every pound of food, as ll as every rail and spike, had to be brought great distance, required remarkable organi- tion. Three hundred sub-contractors were ployed on the portion of the line crossing e plains. Bridge-gangs and track-layers

followed close on the graders' heels. In 188 over two and a half miles of track a day we laid. In the following year, for weeks succession, the average ran three and a ha miles a day, and in one record-smashing thr days twenty miles were covered. By the en of this year the track was within four miles the summit of the Rockies.

The change of route across the plains ha made it essential to pierce the Rockies by more southerly pass than the Yellowhead. T Kicking Horse or Hector Pass, short but stee was finally chosen, but here, as at the Yello head, to cross the first range did not me victory. The towering Selkirk range faced t pass, as the Cariboo Mountains flanked t Rockies farther north. Until the rails reach the hills the engineers had found no w through them, and had contemplated a lo detour to the north, following the windi Columbia. Then Major Rogers, the engin whom James J. Hill had suggested to ta charge of the location of the mountain secti following up a hint of Moberly, an ear explorer, found a route, steep but practica across the Selkirks, following the Beaver ri valley and Bear Creek, and then throu Rogers Pass into the valley of the Illecillewa

ıd so through Eagle Pass to the settled loca-
ɔn at Kamloops. Both in the Kicking
orse and in the Rogers Pass gradients of 116
et to the mile were found necessary, but
ese difficult stretches were concentrated
thin one operating section of a hundred and
enty miles, and could easily be overcome
the use of additional engines. Unique
ovision was made against the mountain
alanches by erecting diverting timbers near
e summits and building mile upon mile of
ow-sheds, over which the avalanches passed
rmless. As a result of these expedients and
raising the road-bed across the prairies un-
ually high, the Canadian Pacific lost less
ne through snow blockades than the great
lways of the eastern United States.

It was not until 1884 that the wilderness
rth of Lake Superior was attacked in strong
ce. Nine thousand men were employed
re alone. Rock and muskeg, hill and hollow,
ıde this section more difficult to face than
en the Fraser Canyon. In one muskeg area
day seven layers of Canadian Pacific rails
buried, one below the other. The stretch
ng the shore of the lake was particularly
ficult. The Laurentian rocks were the
lest known to geologists, and, what was

more to the purpose, the toughest known t
engineers. A dynamite factory was built o
the spot and a road blasted through. On
mile cost $700,000 to build and several co
half a million. The time required and th
total expenditure would have been prohib
tive had not the management decided to ma
extensive use of trestle-work. It would ha
cost over two dollars a cubic yard to c
through the hills and fill up the hollows
team-haul; it cost only one-tenth of that
build timber trestles, carrying the line hig
and to fill up later by train-haul.

An unexpected test of the need of th
section came before it was completed. Ea
in 1885 the government realized too late th
serious trouble was brewing among the ha
breeds and Indians of the North-West. U
less troops could be sent in before the gr
grew, Riel would have thousands of India
on the war-path, and a long and bloody co
test and a serious setback to the West wo
be inevitable. The railway was far from co
plete, with a hundred and twenty miles of g
unfilled, and the government considered it
possible to get the troops in in time. M
Van Horne, who had had much experience
handling troops in the Civil War, did not h

hat word in his vocabulary, and astonished
he authorities by offering to take men from
ingston or Quebec to Qu'Appelle in ten days.
art of the gaps were bridged by temporary
ils laid on ice and snow, only ninety miles
eing uncompleted by spring. In one stretch
he men were marched across the ice to save
long detour. Through the rest they were
rried, covered with furs and straw, in con-
actors' sleighs along the tote-roads from one
mp to the next. In four days from leaving
ingston the first troops landed at Winnipeg ;
d though the revolt was not prevented,
was speedily crushed. There was no
nger any question about the value of the
rth shore link, and the opposition to the
nadian Pacific fell from that hour. It was
en suggested that the company should build
statue to Louis Riel. As for the government,
could well claim that its persistence in push-
g through this part of the road nearly offset
s red-tape carelessness in permitting the re-
llion to come to a head.

Meanwhile, the government section between
rt Arthur, or rather Fort William, and
innipeg had been taken over by the com-
ny in 1883, though not entirely completed.
wo years later the thousands of Chinese

navvies working on the difficult Kamloop
Port Moody section finished their task, a
the government work was done. The o
gap remaining lay in the Gold Range, a
here in the Eagle Pass, at Craigellachie,
November 7, 1885, the eastward and westwa
track-layers met. It was only a year or
before that the Northern Pacific had ce-
brated the driving of the last golden spike
an excursion which cost the company a th
of a million, and heralded the bankruptcy
the road. There was no banquet and
golden spike for the last rail in the Canad
Pacific. William Van Horne had announ
that ' the last spike would be just as good
iron spike as any on the road,' and had it
been that Donald A. Smith happened al
in time to drive the spike home, it wo
have been hammered in by the navvy
the job. Six months later the first passe
train went through from Montreal to V
couver. The longest railway in the w
was open from coast to coast, five y
before the end of the time required by
original contract.

To realize how great a work had been acc
plished requires to-day some effort of
imagination. The Canada the present gen

ion knows is a united Canada, an optimistic, elf-confident Canada, with rapidly rounding-ut industries and occupations which give cope for the most ambitious of her sons as vell as for tens of thousands from overseas. t is a Canada whose nine provinces stretch lmost unbroken from ocean to ocean. But he Canada of a generation earlier was far ther. On the map it covered half a con-inent, but in reality it stopped at the Great .akes. There was little national spirit, little iversity of commercial enterprise. Hundreds f thousands of our best-born had been drawn y the greater attraction of United States ities and farms, until one-fourth of the vhole Canadian people were living in the Republic.

It was the opening up of the West that hanged the whole face of Canadian life, that ave a basis for industrial expansion, that uickened national sentiment and created usiness optimism. And it was the building f the Canadian Pacific that opened up the Vest and bound it fast to the distant East. ertainly not least among the makers of anada were the men who undertook that oubtful enterprise and carried it through very obstacle to success; and not least

among the generations whose toil and fait
have made possible the nation of to-day we
the four millions of the Canada of the eighti
who flung a great railway across the va
unpeopled spaces of a continent to the f
Pacific.

CHAPTER IX

THE ERA OF AMALGAMATION

/ITH the building of the Intercolonial, the rand Trunk, and the Canadian Pacific, the ain lines of communication from ocean to cean were completed. In the decade which llowed, the marked features were: the doption by the Dominion government of a olicy of aid to purely local roads, and the xpansion of the two great private companies, artly by new construction and partly by cquisition of the smaller lines.

It has been seen that the policy of Canada ter 1851 and of the Dominion after Con- deration was to give assistance only to lines more than local and usually more than ovincial importance. During the first ten fifteen years after Confederation promoters oked to province and municipality for aid, id did not look in vain. Soon the pro- nces outran their resources, and began to

clamour for increased federal subsidies to me
the pressing charges. But the Domini
government concluded that, if it had to p
vide the money needed, it might as well g
it direct, and secure whatever political cre
the grants would entail. In 1882 it decid
to embark on a new subsidy policy.

In that year Sir Charles Tupper, minister
Railways, introduced a resolution to gran
subsidy of $3200 per mile—sufficient to p
vide the hundred tons of steel rails requi
for each mile at the existing price of $3
ton—to each of four carefully selected roa
one in each of the four original provinc
During the next year eleven subsidies w
voted, chiefly to Quebec and New Brunsw
roads; in 1885 twenty-five were voted, a
fresh votes were made every year thereaf
Many of the subsidies lapsed through fail
to begin construction, but usually they w
revoted. The payments made averaged
million dollars a year. The practice did
make for pure politics, and it often led to
construction of lines for which there
no economic justification whatever. Trust
shareholders were induced to invest on
unfortunately wrong assumption that
government had assured itself of the n

nd the potential profit of the line before ndorsing it by a subsidy.[1] In the western rovinces a parallel policy of aiding local lines as adopted in 1884, except that land instead f cash was offered, a policy maintained until 894.

He who paid the piper then stood on his ights to call the tune. Acting upon the wide ower conferred by the British North America ct, the Dominion government in 1883 sweepngly designated as 'works for the general dvantage of Canada,' and therefore subject federal control, not only the main lines of ailways, but the branch lines then or thereter connecting with or crossing these lines r any of them. The power thus claimed as not effectively exercised for some time. 'Alton M'Carthy repeatedly urged in parliaent from 1880 onward the creation of a ominion Railway Commission, but the opposition of the railways proved too strong for im. When in 1886 the United States set p its Interstate Commerce Commission, the

[1] One such company, the Caraquet, which was given $400,000 subsidies, declared, in floating $500,000 in bonds in England, at the capacity of the road was taxed to its utmost, and that immense traffic was in sight. At that time its entire rolling-ock consisted of two locomotives, one passenger car, two box d fifteen flat cars, and a snow-plough.

government moved and appointed a roy commission, with Sir A. T. Galt as chairma to consider the general question. Their repo noted the existence of many grievances a suggested specific remedies, but consider that until further experience of the workin of the English and American commissio was available, Canada's needs could best met by an extension of the powers of t Railway Committee of the Cabinet.

It may be noted that in 1882 the selling railway tickets by private persons, a practi known as 'ticket scalping,' was prohibited Canada, though the railways were forced buy the exclusive privilege of selling th own tickets by agreeing to redeem unus portions.

The original contract with the Canadi Pacific had provided for an eastern termin near Lake Nipissing, in order to show p ference neither to Montreal nor Toronto, eit of which could make connections by indepe dent roads. Similarly, we shall see, thi years later, Moncton was chosen as a termin of the National Transcontinental, to hold t balance even between Halifax and St Jo It was, however, impossible for the Canad

Pacific to accept as permanent an arrangement which left it halting in the wilderness, and depending upon possibly rival railways for outlet to the great cities and ports of the east. It had, in fact, been empowered in its charter to acquire the Canada Central and to obtain, hold, and operate a line or lines of railway from Ottawa to any point at navigable water on the Atlantic seaboard, or to any intermediate point'—terms sufficiently sweeping. Few were surprised, therefore, when the directors began a policy of eastward expansion, though many were surprised at the boldness and extent of the plans and the speed and masterful strategy of the execution.

The first and most obvious move was to buy out the Canada Central, extending from Ottawa through Carleton Place to Pembroke, and under construction westward to Callender on Lake Nipissing. This was done in 1881, and the road was completed two years later. Again, in 1881, the parent line of the Canada Central, the Brockville and Ottawa, was acquired, and three years later a controlling interest was secured in the stock of the St Lawrence and Ottawa, thus giving connection with the St Lawrence both at Brockville and

at Prescott. Still pressing eastward, th Canadian Pacific next sought entrance t Montreal and to Quebec. The North Shor road, built by the province of Quebec, woul most easily give the connection sought. Th province was induced, in 1882, to sell to th Canadian Pacific the western section, fro Montreal to Ottawa. At the same time th eastern section, from St Martin to Montrea was sold to the North Shore Syndicate. Th Grand Trunk, alarmed at this advanc attempted to block further expansion b securing, jointly with the Central Vermon control of the latter section. But the Can dian Pacific had the ear of both the Dominio and the provincial governments, and threa of aid in building a parallel line forced th Grand Trunk to relinquish control to i great rival. Not yet content, the Canadi Pacific sought winter ports at St John an Halifax. It secured control of the Sout eastern Counties in Quebec, built a short li through Maine to Mattawamkeag with t aid of a large Dominion subsidy, acquir running rights or control by lease over pa of the old European and North America, and thus entered St John. In 1890 s eastern development was completed r

time by the lease of the New Brunswick Railway, which had recently absorbed early all the small lines in western New Brunswick.[1]

Meanwhile the management had been equally aggressive in obtaining feeders in central and western Ontario, the very heart of the Grand Trunk's territory. In 1881 the Ontario and Quebec was chartered, by interests friendly to the Canadian Pacific, to build a line from Ottawa to Toronto, by way of Smith's Falls. Two years later this company acquired leases for 999 years of three important lines, and transferred them, along with its own road, to the Canadian Pacific. The first of these lines was the Toronto, Grey and Bruce, the narrow-gauge railway which ran north to Georgian Bay; the second was the Credit Valley, extending from Toronto to St Thomas; the third, the Atlantic and North-West, a road with little mileage but most useful charter powers, used for the seaward extension. Later, a railway was built from St Thomas to Windsor. Thus the Canadian Pacific secured access to

[1] The earliest intercolonial project, a railroad from St Andrews to Gaspé, was brought to completion in 1889 when a short road, the Matapédia, was built, linking the Intercolonial at Rivière du Loup with the New Brunswick Railway at Edmundston.

Lake Ontario, Georgian Bay, and the Detro river. Not yet content, it built a branch Sault Ste Marie. Here connection was ma with the 'Soo' lines, giving outlet to St Pa and Minneapolis, and with the several roa later combined to form the Duluth, Sou Shore and Atlantic. Both of these lin shortly afterwards came definitely under control.

In the prairie West the Canadian Pacific h been promised in 1880 a monopoly of throu traffic for twenty years. The Domini government, it will be remembered, h agreed not to charter, nor to permit the ter tories to charter, any lines between the Ca dian Pacific and the United States bord running south or southeast. Going beyo these terms, the Dominion endeavoured a to prevent Manitoba from authorizing construction of any such road, and disallow one chartering act after another.

From the outset this provision proved source of bitter and dangerous strife. On one side it was contended that without clause the necessary capital could not ha been secured and that faith must be ke that the traffic of the West should go to bu up the eastern provinces, which had mad

ast outlay on the road, rather than a foreign ountry; that the rates of the Canadian acific were as reasonable as those of American oads; and that other causes than railroad ionopoly were responsible for the slow growth f the West. But the West protested that ie rates were exorbitant—otherwise American ompetition would not have been feared—ointed to the exodus of settlers and the dis-ontent of those who stayed, and refused to e sacrificed in the interests of foreign share-olders or even of sister provinces. Un-oubtedly immigration was deterred, and rela-ons between East and West were seriously rained. Finally, in 1888, the Dominion overnment was forced to yield. The com-any's consent was secured by a bond guar-ntee for some necessary extensions, and the rovision was repealed. The Northern Pacific as brought in by the Manitoba government, nd competitive local roads were chartered, ut in this period the control of the Canadian acific over the western field was not seriously lled in question.

The task before the management to secure affic for the great system thus built up was a fficult one. It was a greater achievement operate the Canadian Pacific successfully

than to build it. When it is realized tha when the company began operation th number of white settlers between Portage Prairie and Kamloops, within twenty miles the line, could be counted virtually on th fingers of one hand, the difficulty of findi traffic may be appreciated. Sandford Flemi had estimated that the road could not pa until there were two million people in t West. Yet pay it did from the start. T company capitalized its scenery, and built a paying tourist trade. When wheat was lac ing, ends were made to meet by carrying trai load upon trainload of buffalo bones to easte factories. United States traffic was carefu cultivated at both ends of the line. An acti immigration campaign was carried on. Vario industries along the line, from coal compan to flour mills, were helped forward for yea A loyal staff was built up, and by gra of efficiency the company pulled throu until the lean days of the early ninet were over.

During this decade of extraordinary activ the Grand Trunk had been neither cont nor passive. Offended by the incursions i its best paying territory, it fought its youn rival in parliament and on the stock excha

ut with no lasting success in either quarter. t was more successful in its own constructive olicy of expansion. In 1879 it had made good bargain by selling to the Intercolonial ie branch from Lévis to Rivière du Loup, hich did not earn operating expenses, and y expending the proceeds in buying an exten- on to Chicago, which enabled it at last to cure the through traffic from the West for hich it had been in large part originally de- gned. Its great coup came, however, in 882, when the onward march of the Canadian acific and the bitter experience of fruitless te wars led it to purchase its old rival, the reat Western, with its Michigan extensions. ie construction of the St Clair tunnel between ort Huron and Sarnia, completed in 1890, arked another forward step in its western rritory. Meanwhile it had acquired, in 84, the Midland Railway, itself a recent nalgamation of the Midland, running from ort Hope to Midland, with the Toronto and pissing, the Grand Junction, from Belle- lle to Peterborough, and the Whitby and ort Perry, effected by two enterprising finan- rs, George A. Cox and Robert Jaffray. our years later it absorbed the Northern and orthwestern roads, which had acquired

jointly a branch from Gravenhurst to Nort
Bay, so that here at least the older road check
mated its rival, securing the very paying lin
between Toronto and the western lines of th
Canadian Pacific.

HUDSON BAY
BRITISH COLUMBIA
ATHABASCA
ALBERTA
SASKATCHEWAN
KEEWATIN
James Bay
UNGAVA
ASSINIBOIA
MANITOBA
ONTARIO
QUEBEC
NEW BRUNSWICK
NOVA SCOTIA
St. Lawrence R.
Anticosti
Vancouver
Victoria
Vancouver I.
Kamloops
Edmonton
Calgary
Prince Albert
Saskatoon
Regina
Moose Jaw
Maoleod
Lethbridge
Waldeck
Portage la Prairie
Gladstone
Brandon
Winnipeg
Emerson
Estevan
Minneapolis
St. Paul
Duluth
Kenora
Pt. Arthur
Ft. William
L. Superior
Sault Ste. Marie
Sudbury
North Bay
Mattawa
Parry Sound
Owen Sound
L. Huron
L. Michigan
Chicago
Muskegon
Grand Haven
Jackson
Detroit
Windsor
Sarnia
Goderich
Toronto
L. Ontario
Buffalo
L. Erie
Smiths Falls
Ottawa
Montreal
Prescott
Brockville
Kingston
Quebec
Levis
R. du Loup
Edmundston
Moncton
St. John
Truro
Halifax
St. Andrews
Sherbrooke
Richmond
Portland
UNITED STATES
RAILWAYS OF CANADA, 1896
Grand Trunk Ry.
Canadian Pacific Ry.
Intercolonial Ry
Prince Edward Island Ry.
Canadian Northern Ry. (Lake Manitoba R. & C. Co)
Canada Atlantic Ry.
Northern Pacific Ry.
Other Railways
Bartholomew, Edin.

CHAPTER X

THE CANADIAN NORTHERN

The first quarter-century of Confederation failed to redeem the glowing promises and high hopes of the founders of the new nation. Much had been done: the half-continent from ocean to ocean had been brought into the fold of one union; national consciousness was slowly growing; great efforts had been spent in linking the scattered parts by railways and waterways. But still political unity and economic prosperity both lagged. The country was torn by racial and religious bickerings. In the East, the exodus to the United States bled the country white; in the West, drought, frost, and the low prices of grain kept settlers away. Canadian Pacific stock, selling in the middle nineties at 35, registered the market's estimate of the future of the Canadian West.

Then, slowly at first, and soon with cumulative momentum, came a transformation.

World-wide causes worked with local facto to change the whole face of affairs. Ne discoveries of gold and rising prices gave ever where a fillip to trade. In the United Stat the disappearance of free land set its farme looking elsewhere. In Canada change methods, or the favourable turn of a climat cycle, enabled the lands of the North-We to prove their abounding fertility. The d covery of gold in the Klondike afforded go advertising for Canada if little more of pe manence. In the government and in t financial, the railway and the industrial worl there were men who rose to the opportunit no longer was Canada's light hid under bushel. The most was made of the alluri gifts she had to offer to men the world over w strove to better themselves, and the flood immigration began.

The first result of the swarming of thousan to the West was a demand for new railwa to open up plain and prairie and mine range, and to make connection with E and West. The building of the railways in its turn gave a stimulus to every indust As in the early fifties and early eight this period of rapid railway expansion—mu longer, however, than previous periods—w

an era of optimistic planning and feverish speculation.

First to seize the golden opportunities were the group of men who built the Canadian Northern. Railway history offers no more remarkable record than the achievement of these few men, who, beginning in 1895 with a charter for a railway one hundred miles long in Manitoba, leading nowhere in particular, succeeded in building in twenty years a road from ocean to ocean, and in keeping it in their own hands through all difficulties and vicissitudes.

Yet it is not exactly correct to say that they began in 1895. A long apprenticeship had been served before that time. William Mackenzie and Donald Mann, the leaders in this group, had both been trained in railway construction. Both were Canadian-born; and had fared forth as youths to make their way in the world. William Mackenzie, born at Kirkfield, Ontario, in 1849, had been in turn school-teacher, country-store keeper, and lumberman before a contract on the Victoria Railway—part of the Midland—revealed his destiny. Donald Mann, born four years later at Acton, Ontario, near James J. Hill's old home, had been brought up for the Christian ministry, but by

twenty-one he was foreman in a lumber camp
At twenty-five he joined in the first rush t
Winnipeg, and next year he undertook th
first of many contracts on the Canadia
Pacific. William Mackenzie had also carrie
through much work for this company. I
1886 the notable partnership of Mackenzie an
Mann was formed. The firm built the Calgar
and Edmonton, the Qu'Appelle, Long Lak
and Saskatchewan, the Canadian Pacific sho
line through Maine, and many minor railway
They developed capacities which made eac
the complement of the other—Mackenzie
master of finance, and Mann as successful i
extracting a subsidy from a politician as i
driving ahead the work of constructio
Later Z. A. Lash, a shrewd and experience
corporation lawyer, joined them, and the thre
with able lieutenants, carried through the
ambitious plans without more than momenta
pause, until within sight of the goal.

It was in 1895 that William Mackenzie a
Donald Mann, along with two fellow-co
tractors, James Ross and H. S. Holt—it
noteworthy how many Canadians eminent
finance and industry found their start in t
building of the Canadian Pacific—decided
buy some of the charters of projected weste

ads then going a-begging, and to build on eir own account. They secured the charter the Lake Manitoba Railroad and Canal mpany, carrying a Dominion subsidy of oo acres a mile for a line from Portage la airie to Lake Manitoba and Lake Winnigosis, and induced the Manitoba government to add a valuable guarantee of bonds d exemption from taxes. In 1896 running hts were secured over the track of the anitoba and Northwestern from Portage to adstone, and construction was pushed a ndred miles northwest from Gladstone to auphin. Next year Lake Winnipegosis was ached. Then the partners looked eastward. e coming need of the West was an outlet m Winnipeg to Lake Superior, to supplent the Canadian Pacific. Accordingly in 98, under powers given by Dominion, ntario, and Minnesota charters, construcn was begun both at Winnipeg and near rt Arthur. Three years later the line was mpleted. Meantime the earlier road had anched westerly at Sifton, and by 1900 had ssed the border into Saskatchewan at wood; while in 1899, in amalgamation with e Winnipeg Great Northern, chartered and bsidized to Hudson Bay, the name of the

combined roads was changed to the Canadi
Northern.

Then came the coup which first made t
public and rival railways realize the ambitio
reach of the plans of the new railway. It w
be recalled that when, in 1888, the ban up
competition southward with the Canadi
Pacific had been lifted, the Northern Paci
had entered Manitoba. It had gradually bu
up a system of three hundred and twe
miles, but had not given the competit
looked for, dividing traffic with the Canad
Pacific rather than cutting rates. Now
parent line was in the receiver's hands, a
its straits gave the Manitoba governm
its opportunity. It leased for 999 years
the Manitoba lines of the Northern Paci
but decided it could not profitably oper
them itself without connection with
lakes. The only question was whether
re-lease them to the Canadian Pacific or to
Canadian Northern. After a lively con
the younger road secured the prize. A
stroke it thus obtained extensive terminal
Winnipeg, a line south to the American bor
branches westward through fertile territ
and a link which practically closed the
between its eastern and its western roads.

The Canadian Northern had now become the hird largest system in the Dominion, stretching from Lake Superior to Saskatchewan, with nearly thirteen hundred miles in operation in 902. The feeders were extending through he rich farming lands of the West; the line o Port Arthur supplemented the Canadian acific, providing a second spout to the funnel. ut this merely local success did not long content its promoters. They announced their ntention to build from sea to sea. Transontinental railways were then much in the ir: the Grand Trunk, the Trans-Canada, the reat Northern all planned extensive projects. Reviving prosperity and new-found onfidence were making a dollar look as mall to government and public alike as a ime had seemed some years before. Aid ight confidently be looked for—but by hich aspirant?

In 1902 and 1903 a junction of forces between the Grand Trunk and the Canadian orthern was proposed, and would have had uch in its favour. The negotiators could not ome to terms, however, and each road continued on its independent plan. Nothing aunted by the Dominion government's decision to recognize and aid the Grand Trunk,

the Canadian Northern turned to a policy
piecemeal construction, seeking aid from th
provinces as well as from the Dominion.

Making hay while the subsidy sun shon
and the prosperity of the Laurier régime wa
at its height, the Canadian Northern presse
forward extensions, flung out branches, fille
in gaps on every side. The main line wa
pushed westward to Edmonton in 190
Branch lines were thrown out freely in all th
prairie provinces. In Ontario the gap nort
of Lake Superior was bridged by a line fro
Port Arthur to Sudbury, not completed unt
1914. Toronto and Ottawa were linked wit
the western lines, and several feeders we
acquired which gave connection with Kingsto
and Brockville. In Quebec the Great Norther
running from Hawkesbury on the Ottawa
Quebec City, was absorbed in 1902, and th
Quebec and Lake St John five years late
By building a tunnel three miles long und
Mount Royal, an entrance was secured in
the heart of Montreal. Nova Scotia did
part by lending money to another Mackenz
and Mann enterprise, the Halifax and Sout
western. The Inverness Railway in Ca
Breton and the Nova Scotia Central wi
minor lines were built or acquired, giving t

anadian Northern first place in mileage in e province.

The most difficult task still remained—uilding a third railway through the mountains the Pacific. Surveys for a road from ellowhead Pass to Vancouver by Sandford eming's old route were begun in 1908. y the aid of lavish guarantees and subsidies is last link in the transcontinental system as pushed to completion in 1915.

The financial and political aspects of this eat enterprise were as striking as was the nstruction. Governments have many a ne given lavish aid, promoters have often ilt roads entirely out of the proceeds of nd issues, financiers have dominated great lway systems by a majority or controlling terest in the stock. But never before did group of men plan to unite, on such a le, all three arrangements—to build ten busand miles of railway without themselves vesting a dollar and still retain control. e men behind the Canadian Northern not ly planned such a project, but carried it rough, displaying in the process, and at ery stage of the undertaking, a mastery of litical diplomacy, an untiring persistence, d great financial resourcefulness. They are.

therefore, entitled to a special place amon the world's railway builders.

Their plan was simple in principle, if wor drously complicated in working out. It wa to build the road by government subsidie and the proceeds of the bonds guarantee by government, and to control the roa by issuing to themselves, for their service of promotion and management, practicall all the common stock. To carry out th audacious plan, political influence, public e thusiasm, and the confidence of outside i vestors in Canada's future were all require and were all forthcoming.

Dominion and province vied in aid. Th aid took many forms. The Dominion ha abandoned in 1894 its policy of giving lan grants, but the original companies which co bined to form the Canadian Northern ha previously been promised and later receiv over four million acres: up to 1914 abo eighteen million dollars had been realized fr the sale of parts of this land, and the gra unsold were worth at least ten millions mo In addition, Ontario gave two million ac and Quebec one-third as much. Cash su sidies were not wanting. The Liberal gove ment of Sir Wilfrid Laurier voted somethi

s than two millions in cash to aid in build-
g the link between Winnipeg and Lake
perior. It declined to recognize or aid the
tension to the Pacific coast; but in 1912
e Conservative government of Sir Robert
rden gave over six millions for this work,
d in the following year fifteen millions more
the Ontario and western Alberta sections
the main line. The provinces were less
ish, Quebec, Ontario, and Manitoba offer-
g all told six millions.

But it was neither to land-grants nor to cash
sidies that the Canadian Northern looked
its chief aid, but to government guarantees.
is device, the main form of state aid given
our first railway era, had long been dis-
dited by the unlucky fate of the Grand
unk and the Northern guarantees, and had
n sparingly used since. To the Canadian
rthern its revival was chiefly due. It was
seductive form of aid: provided that the
lway thus helped had good traffic pro-
cts, the government stood little chance of
s and the railway greatly gained by the
tainty of the sale of its bonds and the
her price secured. But, like other forms
the extension of public credit, such as the
ue of paper money, state guarantees are

difficult to keep within bounds, and comp
ever-fresh extensions to save the old liabilit
So Dominion and province alike found. Fro
1903 to 1911, under Sir Wilfrid Laurier, t
Dominion guaranteed bonds of the Canadi
Northern system to the extent of fifty-s
millions; from 1912 to 1914, under Sir Robe
Borden, it endorsed the Canadian Northern
notes for forty-nine millions more. Nor we
the provinces behindhand. Mainly in t
seven years from 1908, the five westernmo
provinces pledged their credit on behalf
the same system to the astounding amou
of over one hundred and thirty millio
British Columbia leading; Nova Scotia ma
a loan of another five millions. Thus e
dorsed, usually as to both principal and
terest, the bonds of the Canadian Northe
were floated with little difficulty, so long
money was to be had at all by any seeker.

In the meantime, while the road was be
built by state gifts and bondholders' lendin
the great bulk of the stock of the parent ro
and of the chief subsidiaries was conveyed
Messrs Mackenzie and Mann for their servi
in promoting and managing the system. T
method of financing had its dangers.
meant that there was no large commitm

f shareholders' capital, to secure support in ifficulty and compel responsibility in manage- ient. It meant that the control of the vast nterprise was in the hands of a few men, nchecked by public inquiry or the criticism f independent shareholders—whatever that ight be worth. It meant that with all the ash capital taking the form of bonds, any ilure to make ends meet, any lengthened epression, would bring risk of the mortgage- olders' foreclosure and receivership—not erely the shareholders' waiting for a turn f the tide—except in so far as the burden ould be shifted to the governments that had ndorsed the notes.

In the early years, thanks to general pros- erity and to the strategic location and care- l management of the system, ends always et, and a little over, and funds were always rthcoming for fresh expansion. But early 1914 a crisis arrived in the company's fairs. The mountain section particularly, hat with the higher cost of labour and e unexpected engineering difficulties, was lling for tens of millions more; the strin- ncy in the world's money markets, following e Balkan Wars, made investors chary of en gilt-edged offerings. There were many

millions of subsidies and guarantees still t
come from the state, but they would com
only as the road was completed, and mean
time construction had to be financed. Th
partner-owners could not provide the read
cash needed for completing the gigantic tas
The bondholders had no inducement to d
so unless further guaranteed by the stat
The western provinces were at last becom
ing frightened of the load they had alread
assumed. There was only one resource, th
Dominion government. True, it had only
1913 made a gift of $15,000,000 on solem
assurances that not a cent more would
needed. But, it was urged, the emergen
was real. The road could not be left han
ing half finished, after all the millions alrea
spent. Canada's credit must be protected, a
so the government, after a lively struggle, p
through a positively last guarantee of fort
five millions. In return it was given forty o
of the hundred millions stock to which t
capital was reduced, and took the right
appoint one government director. Wheth
this step meant that the government was n
going to share the control and the prof
of the company, or whether it meant th
it was henceforth to be saddled with t

CANADIAN NORTHERN RAILWAY, 1914

Canadian Northern Ry., 1903 ——————

Canadian Northern Ry. added since '03 ·····

Canadian Northern under construction – – – – –

Bartholomew, Edin.

responsibility for any deficits, was a point much in dispute. Later, the outbreak of war in Europe delayed, but did not altogether halt, the floating of the loan and the completion of the remaining links.

Meanwhile, the many subsidiary enterprises, which the example of the Canadian Pacific has caused us to think appropriate to the transcontinental railway, had been undertaken by its youngest rival. Fast steamers between Montreal and Bristol, grain elevators, hotels, express and telegraph companies, all brought grist to the mill. Hardly to be distinguished were the allied interests of the partner-owners — iron-mines in the Lake Superior district, coal-mines in Alberta and Vancouver Island, whaling and halibut fisheries on the Pacific, and lumber-mills on the British Columbia coast—all bearing some relation to the development of the railway system.

In 1896, a railway a hundred miles long, beginning and ending nowhere, operated by thirteen men and a boy! In 1914, a great transcontinental system practically completed, over ten thousand miles in length, and covering seven of Canada's nine provinces! The impossible had been achieved.

CHAPTER XI

THE EXPANSION OF THE GRAND TRUNK

In the eighties, it will be recalled, the activi
of the Canadian Pacific in the eastern pr
vince had stirred the Grand Trunk to a
aggressive counter-campaign. Line after li
had been absorbed, extension after extensi
had been built. New life seemed to ha
been injected into the old system. Holde
of even ordinary shares began to dream
dividends.

The activity was brief and prosperi
briefer. Only in the golden days from 18
to 1883, when the West was enjoying its fi
'boom' and railway construction was at
height, did the policy of expansion justi
itself from the shareholder's point of vie
The year 1883 saw the high-water mark
prosperity for the Grand Trunk; for in th
year dividends were paid not only on guara
teed but on first, second, and third preferen
stock. Not again until 1902 was even

partial payment made on the third preference ; not until 1900, save for a fraction in 1887, was anything paid on second preference ; first preference dividends were fractional and occasional, and even the guaranteed stock dividends were passed time and again. The financial position of this great system in the middle nineties may be briefly summed up in the statement that securities of the par value of £16,000,000, which in 1883 had a market value of £12,000,000, were worth in 1894 only £3,500,000. The junior securities had become only gambling counters on the stock exchange.

Where did the cause lie ? There was not one ; there were several. The first was in capitalization. The line had been hopelessly over-capitalized to begin with, and the new acquisitions doubled fixed charges, while net receipts increased only ten per cent ; feeders had proved suckers.[1] Secondly, in the general commercial situation. The whole continent was undergoing a trying test of panic and depression, of low prices and industrial stagnation. For a quarter of a century after

[1] One recent acquisition, the Toronto Belt Railway, to meet rental of $19,000 and working expenses of $22,500, had gross receipts of less than $5000 a year.

1873 the gloom had been broken only at bri
intervals—from 1880 to 1883, and from 188
to 1889. In 1893 the price of wheat fell to th
lowest point in a century. The great Missi
sippi valley had been flooded with settler
railway and steamship threw their millions
bushels on the world's markets, while the go
basis of prices failed to expand in proportio
Western farms were, it was said, 'plastere
with mortgages'; one-sixth of the railwa
in the United States went into receiver
hands in 1893 alone. Free-silver agitato
denounced the 'gold bugs' of the eas
Coxey armies marched to Washington. A
other cause was in excessive competition. T
St Lawrence was more accessible to shippe
than ever, while the Canadian Pacific had c
into the best paying territory in Ontario.
the Chicago traffic absolute demoralizati
ruled—reckless rate wars were waged, agre
ment after agreement was broken, line w
played against line by grain-shipper or
dressed-beef magnate. A final cause was
management. The attempt was still bei
made to manage a great railway from Londo
three thousand miles away. The Canadi
officials had little independent discretio
interminable delays, lack of initiative,

tape, nepotism, followed inevitably. Here and there officials strove strenuously to better conditions, but the odds were against them. Practically no Grand Trunk stock was held in Canada; it was not even quoted on Canadian exchanges; Canadians regarded the road entirely from the user's point of view.

The traveller and shipper had less to complain of than the shareholder. The service of the road had been greatly increased. The mileage was large in proportion to population. Rates were low. True, it was a rare event for a Grand Trunk train to arrive on time, but it usually arrived.

For these various ills corresponding remedies were sought in turn. Drastic capital reorganization was discussed, but nothing was done. Commercial prosperity could not be revived by the efforts of a single railway. Competition was met by agreement after agreement, 'gentleman's' and otherwise, but in vain. The most hopeful resource lay in the only remaining direction, change of management.

In 1895 Sir Henry Tyler resigned from the presidency after twenty-three years of faithful service. His place was taken by Sir Charles Rivers-Wilson, who had a record of efficient

service on the borders of politics and finance The new president and a committee of direc tors made a thorough investigation of th Grand Trunk, and recommended some imme diate improvements. Their chief contributio to its success, however, was the discovery o Charles M. Hays.

The great rival of the Grand Trunk ha pressed forward to prosperity under the driv ing power of an American general manage The new administration decided that it, too would look to the United States for a chie executive of the ruthless efficiency and moder methods which the crisis demanded. The found him in the man who had pulled th Wabash out of a similar slough of despon Mr Hays was not quite forty when, in 189 he was appointed general manager of th Grand Trunk. He had risen rapidly since th days when, a boy of seventeen, he had entere the office of the Atlantic and Pacific. A twenty-nine he had been secretary to th general manager, and three years later manage himself, of the Wabash.

His presence was soon felt. The sta realized, some with relief, some with con sternation, that the good old leisurely day the days of vested interests, were gon

CHARLES MELVILLE HAYS

From a photograph by Notman

any were pensioned, some were dismissed. some cases American officials were imported fill the vacant posts, to the patriotic dis-ntent of the old guard. Equipment was erhauled, larger freight cars were ordered, d new terminals acquired. The main bridges the road—the Suspension at Niagara Falls, e International at Fort Erie, and the Victoria Montreal—were all rebuilt on a larger scale tween 1896 and 1901. The double tracking the main line from Montreal westward was ntinued, and many of the sharp curves and avy grades of the original construction were vised. Elevators at Portland, Montreal, dland, Tiffin, Goderich, Point Edward, and rt William were built or acquired. Trains me in on time. The whole system was peeded up.'

Later changes in the administration may briefly summarized here. In 1900 Mr ays's five-year contract as general manager pired. At the same juncture a vacancy curred in the presidency of the Southern cific, which had fallen on evil days, and ays was offered and accepted the post at ir times his salary with the Grand Trunk of 5,000 a year. A year later he was back ain in Canada. There was not room in the

Southern Pacific for both Hays and Harrima
then in financial control, and the Grand Tru
directors seized the opportunity which t
breach afforded. In 1909 the wide reco
nition of Mr Hays's great services led to lo
overdue increase of the authority of t
Canadian officials of the road by his appoi
ment as president, on the retirement of
Charles Rivers-Wilson. Three years later, w
his projects for expansion still incomplete,
met a tragic death in the sinking of the *Titan*.
Mr Edson J. Chamberlin, who had increas
his reputation for efficiency by his mana
ment for four years of the Grand Trunk Paci
was chosen as successor in the presidency.

Fortune favoured the new administrat
from the start. The tide in the continen
business affairs turned soon after the new m
took the helm. The long depression end
prices rose, farmers met mortgage paymen
factory chimneys smoked once more, tra
multiplied.

The first result of the improved conditi
was the easing of the tension in railway re
tions. There was no longer a life-and-de
necessity for rate-cutting and traffic-steali
Rate wars between the trunk lines in
United States came to an end. On

anadian side peace was longer in coming. he rush to the Klondike in 1897 started a ate war between the Canadian Pacific and he Grand Trunk, with its American con- ections, which lasted nearly a year. In its ourse rates were cut in the east as well as in ie west, and the Canadian Pacific sent its est-bound freight from Toronto by Smith's alls rather than use any longer the direct ne of the Grand Trunk to North Bay. eace was patched up, but the Canadian acific shortly afterwards set about building road of its own from Toronto north to its ain line, thus threatening the Grand Trunk ith permanent loss of western business, and oviding it with one incentive toward the great estward expansion it was soon to undertake.

Along with prudent retrenchments went in- easingly aggressive expansion, both east and est. It was one of the main objects of Mr ays's policy to secure a hold on the rich affic possibilities of New York and the New ngland states. Portland, the original New ngland terminus of the Grand Trunk, had ot become the great commercial centre it ice expected to be. The first further step as taken in 1899, when the Grand Trunk cured control of the five hundred miles of

the Central Vermont, with which relations ha
been close for some years past. With runnin
rights over a gap controlled by the Bosto
and Maine, this gave a line from St John
Quebec, to the port of New London, Conne
ticut; from this point connection was mad
by boat to New York, where valuable termin
docks were owned.

New London was not the final goal, how
ever—Providence and Boston offered great
possibilities. But to seize them it was fir
necessary to break through the monopoly
New England land and water transpor
which the New York and New Haven line ha
acquired, or to come to terms with the i
terests in control. At first the word was
fight. The Grand Trunk was received wi
open arms by the business men of Mass
chusetts and Connecticut, eager for compe
tion in railways, and in spite of all the po
tical influence of the New Haven, Ha
secured a charter for his Southern New En
land Railroad, to run from Palmer, on t
Central Vermont system, to Providence;
branch from Bellows Falls to Boston was al
planned. Construction was begun on the Pr
vidence line in May 1912, but suddenly halte
The Grand Trunk management declared t

alt due to financial conditions, but New England suspected a compromise with the New Haven. Probably the change in policy was mainly due to the change in management, the new administration setting less store on the extension than the Hays-Fitzhugh executive had done.

All these eastern activities, however, were overshadowed by the Grand Trunk Pacific scheme. It was not the first plan the Grand Trunk had formed for westward expansion. In the embryo days of the Canadian Pacific, it may be recalled, the government had offered to the old line the opportunity of carrying through the new one. Later, a connection with the Northern Pacific through Sault Ste Marie had been discussed, but Van Horne had forestalled this move. Still later an extension of the Grand Trunk from Chicago northwesterly, possibly through control of the Wisconsin Central, had been under consideration. Nothing came of these plans until the proved fertility and rapid settlement of the Canadian North-West, the improved position of the Grand Trunk in the money markets, and the threatened loss of traffic between Toronto and North Bay, lured and urged the new administration forward.

In 1902 Mr Hays announced that the dire tors were considering building a line fro North Bay, through New Ontario westwar to a terminus on the Pacific at Port Simps or Bute Inlet. It would be a line of t highest standards. Government aid, the a nouncement continued, would certainly sought and expected.

Once more railways became Canadi politics. There was little doubt that t government would aid either this or so rival transcontinental scheme. Opposition the lavish subsidy policy of the past had d veloped, indeed, but it was overwhelmed the demands from every quarter for a vigoro forward policy. It was Canada's growi time, and new-born confidence spurred count and government on. But if the line was to not merely a private enterprise, but in part policy of state, then considerations of hi politics and low politics alike came in, a compelled material changes in the Gra Trunk's scheme before it could secure gove ment acceptance.

A road from North Bay west would satis the local demands of the western provinc but would not satisfy the local demands the East, or meet certain common nation

spirations. Eastern, and particularly Que-
ec, interests, demanded that any new trans-
ontinental should be built far to the north,
pening up the wilderness between Hudson
ay and the Laurentian highlands border-
g the St Lawrence. A Quebec company,
ie Trans-Canada, was in fact urgently seek-
g support for such a line, endeavouring,
nce patriotism is in Canada the last re-
ge of the promoter, to stimulate investors
y stressing the military advantages of the
mote route. Again, the Maritime Pro-
nces protested against aid to a company to
rry the traffic of the West to Boston and
ortland instead of to St John and Halifax.

Sir Wilfrid Laurier, the prime minister,
ndeavoured to combine all these ends. His
an provided for a road 3550 miles in length,
ginning at Moncton—a neutral point between
e politically inconvenient rivalries of St
ohn and Halifax—crossing New Brunswick
orthwesterly, skirting the Maine border, and
to Quebec City, where the St Lawrence was
be crossed by a great bridge. Thence it
ould strike westerly far to the north of exist-
g settlements. From Winnipeg the previ-
sly proposed route was followed. The West
ould have the development and competi-

tion demanded, the hinterland of Quebec a
Ontario would be opened, and the ports
the Maritime Provinces put on an equal
with their American rivals. And since t
vast project was much beyond the power
the Grand Trunk to finance, it was arran
that the road should be divided into two s
tions. The eastern, from Moncton to Win
peg, was to be built and owned by the gove
ment and leased to the Grand Trunk Paci
free for seven years and at a rental of th
per cent of the cost for forty-three years f
lowing. The western, from Winnipeg to
coast, was to be built and operated by
company, aided by a government guaran
of principal and interest on the greater p
of the bond issue.

The announcement of this plan in J
1903 led to a storm of controversy as fie
as that which followed the launching of
Canadian Pacific. The Opposition brou
forward various policies, looking to a grea
measure of government ownership; the mi
ter of Railways, Andrew G. Blair, resig
in protest; rival railways opposed ope
and sometimes by secret plot; two gene
elections were fought on the issue. But ra
is a government in Canada defeated o

proposal, sound or unsound, to spend untold millions, if the money is to be had at all. The agreement went through, with modifications, in the following year, and the building of the great northern road began.

The railway policy of the past twenty years is still on its trial, but some tentative conclusions may be ventured.

In the first place, it seems clear that a new transcontinental was needed, not only to open the West, but to develop the hinterland of eastern Canada. The rediscovery of a vast clay belt north of the height-of-land between Hudson Bay and the Great Lakes, its known resources in timber and pulp and its probable mineral wealth, as well as the farming areas of the western plains, and the forest, mine, and fishery wealth of northern British Columbia, all gave some economic justification for the adventure. Perhaps even stronger were the political considerations. Here, again, if railways were Canada's politics, it was not only because Canadians were materialists, but because they were idealists. They were determined that, in spite of geography and diplomacy, in spite of Rocky Mountains and Lake Superior wildernesses, Laurentian plateaus and Maine intrusions,

Canada should be made one and independen
Often this national spirit has been manipu
lated to serve sordid ends in railway as i
tariff matters; the flag has covered a mult
tude of sinners. Yet whether it was th
Grand Trunk or the Intercolonial, the Can
dian Pacific or the Grand Trunk Pacific, th
national purpose has been strong, and mu
fairly be set on the assets side of the shee
Sir Wilfrid Laurier and Sir John Macdona
both worked with high courage and enduri
faith for a greater and more united Canad
Any one who looked at a map of the Dominio
and realized how incredibly narrow a frin
of population was strung out on the southe
border, could not but feel that some attem
to add a second storey to the structure,
give breadth as well as length, was a nation
necessity. Perhaps least defensible was t
Quebec-Moncton section; true, it was esse
tial, if freight was to reach the Maritime por
that a shorter line with better grades th
those of the Intercolonial should be secur
if possible. Grades were bettered in the lin
secured, but the saving in distance was n
as great as old and incorrect surveys had l
the government to anticipate.

How should the road be built, granted

need? Government ownership had its advocates, but experience of political 'machines' and a recognition of the difficulties of a government line in carrying on steamship or irrigation or other subsidiary activities, or in making international extensions, told heavily against such a policy. The real choice lay between the two private companies, the Grand Trunk and the Canadian Northern, which were seeking to rival the Canadian Pacific. Undoubtedly the best solution would have been to amalgamate these companies, and thus to save the eventual outlay on a line north of Lake Superior, on closely parallel lines in the prairies, and on the enormously costly rival lines to be built through the Rockies. True, competition even in railway matters has still its merits, but one strong competitor of the Canadian Pacific would have better served the country than two in financial straits. This solution appeared for a time possible. As has been seen, negotiations were carried on in 1902 and 1903 looking to such a union, but unfortunately without result. Forced to choose, the government had no alternative but to give its aid to the older and better known system.

What standards were to be set for the

new road? The continent's pioneer tradition were plain: build the road in the cheapest way it could be made to hold together, with sharp curves and steep grades if need be, with scanty ballast, wooden bridges, and light rails, since traffic would be light and capital hard to get. Then, if the country developed and perhaps after a reorganization or two rebuild the road on a permanent basis. But 1903 was not 1873, and Mr Hays had learned on the Wabash and on the Grand Trunk how difficult it was for a second-class road to compete, and how costly was the process of rebuilding with the line in operation. He knew that with high and rising wages for trainmen and with frequency of service a minor matter on the long stretches, it was essential to concentrate loads in as few trains as possible, and that a locomotive could haul almost twice as great a load on a four-tenths grade as on one per cent grade. So he determined to build from the outset up to the highest standard securing a lower ruling grade than any other transcontinental enjoyed. The policy meant high fixed charges and low operating costs.

What outlay would be involved and what state aid was needed? Given the route and the standard set, the outlay could not but

vast. It proved, in fact, much greater than he estimates, as is the way with most big nterprises. The government section cost bout a hundred and sixty instead of sixty nillions, and the Grand Trunk Pacific section bout a hundred and forty, or three hundred nillions in all—twice the estimate for the anama Canal and nearly its actual cost.[1] he standard set was high, and proved difficult o attain; labour was scarce and expensive, nd prices of all materials were soaring con-tantly. The large expenditure lent colour o charges of corruption in the construction f the government section. Investigation fter investigation was held, however, without evealing any gross betrayal of trust. One ontractor had been handled too tenderly for epeated delays, possibly engineers sometimes tretched classification on a losing contract, nd doubtless contractors were as usual given he privilege of contributing to party campaign unds. But, fortunately for the good name f Canada, the serious charges of corruption ere not sustained.

[1] The Chicago, Milwaukee and Puget Sound, a high-grade ad built to the Pacific coast at nearly the same time, was pitalized, it may be noted, at $157,000 a mile, or nearly $70,000 mile more than the cost of the Grand Trunk Pacific and ational Transcontinental.

Of this great outlay the country bore t
lion's share. The Grand Trunk Pacific w
organized as a subsidiary company of the o
Grand Trunk, which secured control of owne
ship of all but a nominal share of t
$25,000,000 common stock, given it in retu
for guaranteeing part of the Pacific bon
Only $20,000,000 preference capital sto
was provided for, and this was not issue
The interest of the independent sharehold
was thus negligible. The money required w
secured by the issue of bonds and debe
ture loans guaranteed by the government
the Grand Trunk. Up to 1914, in connecti
with the western section, the governme
had guaranteed the company's bonds to t
amount of over eighty millions, had le
twenty-five millions for ten years at four p
cent, and had made or promised a cash g
of twenty-three millions. On the easte
section, the company was subsidized by t
use for seven years of the road, rent fr
equivalent to thirty-four millions. It was
vast outlay, though not as difficult for t
country to bear as one-third the amou
would have been a generation earlier. T
unique and consoling feature, so far
posterity was concerned, was that the bu

of the government expenditure was provided out of surplus current revenue, so that for the future the net income to be received from rental would much more than balance interest on borrowings.

Once the contract was ratified by parliament and by the Grand Trunk, and the new company had been formally organized with Mr Hays as president and Mr Frank Morse, and later Mr Chamberlin, formerly of the Canada Atlantic, as general manager, the work of surveying and determining the route began. On the government section political difficulties were met in New Brunswick, from the advocates of a route down the St John to the city at its mouth, and engineering difficulties of many forms in the long trail through the northern wilderness. The bridge which was being constructed by an independent company across the St Lawrence at Quebec collapsed in 1907, with great loss of life, and the delay in completing the second bridge made it necessary to depend upon car-ferries for some time. On the western section a good route through the prairies was decided upon, not without vigorous protest from the Canadian Pacific because of the close paralleling of its line. After repeated surveys of the

Peace, Pine, Wapiti, and Yellowhead Passe the last was chosen, and a line was settle upon down the Fraser and Skeena valley passing through two million acres of ferti land. Remarkably low grades were secured in fact, as favourable as on the prairie sectio Kaien Island, 550 miles north of Vancouve was chosen as the terminus, rather than Po Simpson as originally designed, and soon o its magnificent harbour and most unpromi ing site of rock and muskeg the new an scientifically planned city of Prince Rupe began to rise.

As the main line ran far to the north of t St Lawrence lake and river system, the origin plan provided for the construction of branc lines to Fort William, to North Bay, and t Montreal. Of these only the first, aided b the Dominion and also by the Ontario gover ment, was built. For the connection wit North Bay running rights over the provinci road, the Timiskaming and Northern Ontari sufficed. Later, in 1914, the Dominion gover ment itself decided to build the Montre branch. In Alberta and Saskatchewan ov 1200 miles of branch lines were begun, und guarantees of bonds by the provincial gover ments. In British Columbia an independe

oad, projected by the contracting firm of Foley, Welch and Stewart—the Vancouver, Pacific and Great Eastern—promised when completed to give the Grand Trunk Pacific, by a traffic agreement, entrance into Vancouver.

The first contracts on the main line were let in 1905. For ten years construction went on, at the rate of a mile a day, with occasional slackening from scarcity of labour or financial stringency, but with no complete halt. Last to be completed were the section to be built by the company in the Central plateau of British Columbia and the section built by the government west of Cochrane. Meanwhile, the prairie lines had been in operation through to Edmonton since 1910, and grain reached Port William over the Lake Superior branch in the same year.

From the beginning it had been questioned whether the Grand Trunk Pacific would carry out its bargain to operate the government section. The management professed its intention to perform every promise, but fulfilment was delayed. In 1915 the company demurred to assuming the lease, on the double ground that the road was not definitely completed, and that, since the change of government in 1911, the standard

of construction agreed upon had not bee
maintained. Accordingly the governme
took power to operate the road from Winn
peg to Moncton, and to expropriate th
company's branch from Superior to Fo
William, pending further negotiations.

The great Canadian railway companies a
much more than railways. The Grand Tru
system, in its new expansion, branched in
every neighbouring field which could be ma
to increase the traffic. Fleets of steamers,
the Pacific coast, on the Great Lakes, a
on the New England route, filled in gaps
its lines. Modern car-ferries crossed La
Ontario and Lake Michigan, as well as t
river Detroit. Elevators, it has been note
were built at strategic points on the w
from the wheat-field to the sea. Magnifice
hotels were opened at Ottawa, Winnipeg, a
Edmonton, with more rustic resorts in t
parks along the route. Tourist traffic w
stimulated by lowered fares and alluri
advertising.

The Grand Trunk of 1914 was a mu
greater factor in the life of Canada than t
Grand Trunk of 1894; it had become nati
wide in its interests, and had shaken off t
unfortunate traditions of its earlier stagna

Bartholomew, Edin.

lays. Difficult tasks still faced it : the build-
ng up of the traffic of the far north would
lemand ceaseless effort, and when the wheel
f time should bring round slackened business
nce more, it would call for all its powers to
nake ends meet in face of rising wages, taxes,
utlays of every kind. The record of the
ecent past gave assurance that the need would
e met with courage and alert endeavour.

CHAPTER XII

SUNDRY DEVELOPMENTS

ALL the restless activity upon the part
its older and its younger rival did not rob th
Canadian Pacific of the place it had held
the life and interest of the Canadian peopl
With a confident assurance based on th
extent and the strategic location of its line
the imperial richness of its endowment, an
the proved efficiency of its management,
pressed steadily forward until it became th
world's foremost transportation system.

The unbroken success and the magnitud
of the operations of the Canadian Pacific
this period are almost without precedent
railway annals. By 1914 it had under i
control more than eighteen thousand mil
of railway, or more than six times the leng
of the original transcontinental line. It ga
employment directly to ninety thousand me
whose monthly pay-roll reached five millio
dollars, and indirectly maintained many mor

justifying the boast of its president in 1907 that directly or indirectly one-twelfth of the people of Canada received their income from the Canadian Pacific. In 1913 alone, the supreme year of Canadian railway expansion, the Canadian Pacific appropriated for new construction and betterments, equipment, terminal facilities, steamships and hotels, shops and elevators, nearly one hundred million dollars, or more than the original cost of the road. It touched the life of the nation at every conceivable point. From Atlantic to Pacific there was scarcely a town of any importance that was not reached by its lines. But its position was not merely national. It controlled over five thousand miles of railways in the United States, taking rank amongst the foremost systems of the Republic. Its steamship lines stretched more than half-way round the world, and in Liverpool and Trieste, Hong-Kong and Yokohama and Sydney, the red-and-white house flag of the Canadian Pacific made the company and the country known.

The management of the Canadian Pacific showed stability and continuity. It trained up in its own ranks the men for its highest posts. Sir George Stephen, later Lord Mount

Stephen, on resigning the presidency in 188 had been succeeded by Mr, afterwards Si William C. Van Horne. As general manage and then for eleven years as president, Va Horne carried the road through its most dif cult period. In spite of failure of crops, lo prices, and the slow trickling in of settler he kept aglow his own faith in the We and communicated it to others. Indomitab courage, tenacity of purpose, breadth of visio mastery of organization and detail marke him as one of the great railroad builders of t century. Even when he retired from the pr sidency, becoming for another twelve yea chairman of the board of directors, it w only to find new outlets for his energy building pulp and paper mills in Quebec a railways in Cuba; for though, unlike mar millionaires, he had not narrowed into his ow business groove, and could paint a picture well as buy one, the call to action never faile to stir him.

When Van Horne came to the Canadia Pacific in 1882, he brought with him the ma destined to be his successor, Thomas Shaughnessy, a young Irish-American st under thirty, who had been engaged in ra way work since he was sixteen. Appointe

eneral purchasing agent, he rose rapidly, ecoming president in 1899 and chairman f the board in 1911. Sir Thomas Shaughessy maintained the progressive policy and he honourable record of straightforward management which has distinguished the Canadian Pacific—a railway singularly free from he questionable manipulations which have rought so many great American systems to ankruptcy. Other men left their impress on he road: men like Sir William Whyte, for ver twenty years in charge of the western nes, David M'Nicoll, and George M. Bosworth and many others, gave most effective ervice.

After the first hurried staking out of the laim was over, by 1890, the Canadian Pacific efrained from further expansion until about 898: between these years only three hundred iles were added to the system. Then revivng prosperity and the activity of rival roads ed to a new period of expansion. The additions made in this time can best be realized by glance at the map (opposite next page). The ost important may be noted briefly, begining at the Pacific coast.

On Vancouver Island, the Esquimalt and anaimo Railway, which had been projected

originally when it was hoped that Canada first transcontinental would find its termin at Victoria by crossing the straits from Bu Inlet, was acquired from the Dunsmuir inte ests. On the mainland of British Columb activity was concentrated in the southe section. The rich mineral discoveries in t Boundary country led to the extension of t Canadian Pacific westward from Lethbrid through the Crow's Nest Pass. The compa was given a Dominion subsidy, and in retur general reduction of rates was secured. Aft years of contention with the Hill roads whi were crowding into the same territory, and face of immense engineering difficulties, a co tinuation of this line by way of Pentict gave promise of a second through rou Meanwhile, entrance was secured to Spoka and Portland in the United States. In t plains and prairie section a close network lines developed. The narrow-gauge line the Alberta Railway and Irrigation Compa which had done good pioneer service, und the guidance of Elliott Galt, in develop Alberta's possibilities in coal and irrigat land, was absorbed in 1911. The northe country was traversed by two new east a west lines. The Qu'Appelle, Long Lake a

askatchewan, extending from Regina to
'rince Albert, lost to the Canadian Northern
ı 1906, was replaced by a new line and
cutoffs' and extensions built in every quarter.
outh of the border equal activity was dis-
layed in throwing out feeders for the Soo and
)uluth lines. The acquisition of the Wiscon-
n Central in 1909 gave the Canadian Pacific
ntrance into Chicago, while an agreement
ith the Wabash made it possible to link up
s western United States lines with its southern
ntario road at Detroit. In Ontario, a branch
om Toronto to Sudbury made the Canadian
acific independent of the Grand Trunk's
orth Bay link, an extension from Guelph to
oderich tapped a fertile country, a line from
ort M'Nicoll on Georgian Bay to Bethany
ear Peterborough gave a short through route
)r grain, a lake shore route eastward from
oronto provided access to the towns which
ıe Grand Trunk, in its promoters' concern
)r through traffic or in its contractors' desire
)r low land charges, had side-tracked, while
ock purchase and later a lease of the Kings-
)n and Pembroke gave entrance into Kingston.
ı Quebec, short tentacles were pushed up
to the Laurentian hills north of Ottawa;
)uth of the St Lawrence the chief step taken

was the 999-year lease of the Quebec Centra sanctioned in 1912. In the Maritime Pr vinces the New Brunswick Southern or Sho line and the Dominion Atlantic, successor the Windsor and Annapolis, were leased 1911, and running rights secured over t Intercolonial into Halifax.

A marked feature of the Canadian Paci policy from the beginning was the endeavo to control subsidiary or allied activities, a thus gain well-rounded independence. I steamship lines came to girdle half the worl On the Pacific, service to Hong-Kong a Yokohama had begun in 1892 and to Austral in 1893, while a service on the coast fro Seattle to the far north, and on the lak of central British Columbia, followed. T Great Lakes fleet was still earlier in bein In 1903 the purchase of fourteen Elde Dempster vessels ranging from five to eig thousand tons gave a whole North Atlant fleet for seven millions, or the cost of a sing *Lusitania*. It was soon increased by larg and faster boats. A line to Trieste, to secu a share of the immigration traffic from Easte Europe, led to prolonged complications wi the Austrian government early in 1914, account of the hostility of German riva

otels followed steamships, some eight or n being erected at strategic points from St ndrews to Victoria. Departing from the ual American practice, the company owned d operated its own sleeping-cars, and main- ined its own express and telegraph com- nies. Its car-shops provided much of its lling stock. Grain elevators were built at rminal points. In the later years a syste- atic policy of developing its western lands as adopted. A special department of Natural esources was established, irrigation works re begun on a huge scale in the tract of ree million acres between Calgary and Medi- ne Hat, and ready-made farms were pro- ded or loans made to selected settlers.

The method of financing these countless terprises was equally striking. Instead of creasing the proportion of bonded indebted- ss, as was customary, the company sought ditional capital chiefly by the sale of common ock. This procedure was possible because the speculative value of the stock, based marily on the growth of traffic, and of the lue of the western lands still unsold: the vidend rose steadily to ten per cent in 1912, d the practice which prevailed until 1909 issuing the stock at par gave holders valu-

able rights. In the latter year 125 w charged for the shares allotted, in 1912 1 and in 1913 175. As a result of the earl policy an unnecessarily high price was pa for new capital, but fixed charges were ke low, and no great system was as safe fr foreclosure. In 1914 the total assets of t company were valued at over $800,000,000.

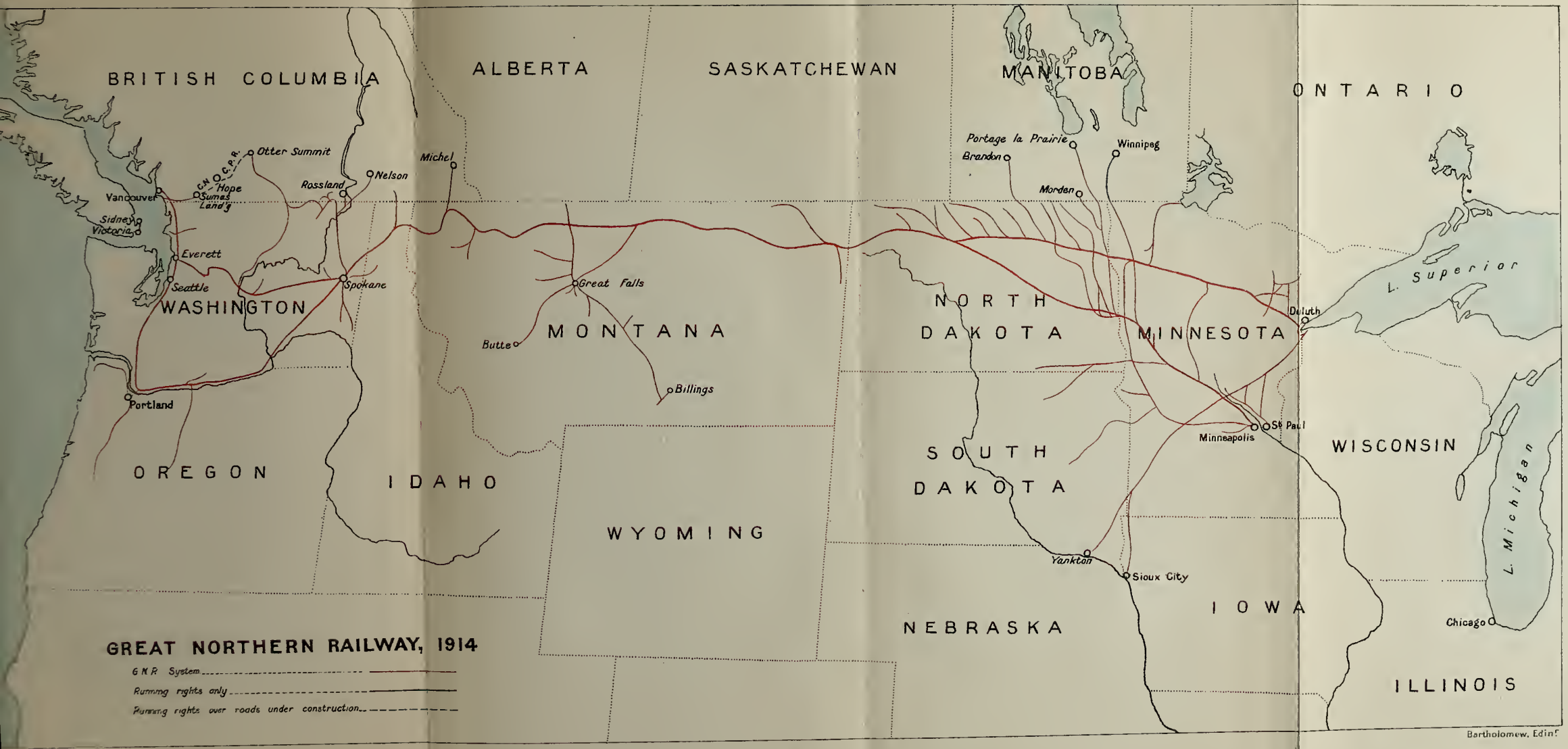
Fifth in mileage among the railway syste of Canada is the group of fragments connect with the Great Northern Railway of t United States. James J. Hill had not be least among the members of the origi Canadian Pacific Syndicate, but differen with his colleagues led to his retirement 1883. Thenceforward he devoted himself e tirely to the building up of the St Pa Minneapolis and Manitoba, the railway a quired from the Dutch bondholders. Und the name of the Great Northern it had be extended by 1893 from Lake Superior Puget Sound, and continued to grow stead until, twenty years later, it controlled nea eight thousand miles. The Great Northe was remarkable in at least three respec Except for the original grants for the Min sota lines, it was built through to the co

thout a dollar or an acre of subsidy from e state. Its capitalization was kept close to e actual cost of the road and its fixed charges re low. It took the lead among American ads in an aggressive and enlightened en- avour to build up the country through which ran, not only by flexible rate charges, but a direct campaign of education among the rmers and other shippers on its route.

The mineral wealth of southern British lumbia and the farming wealth of the stern plains turned Hill's attention toward nada once more about the beginning of the entieth century. In British Columbia the ogress of the Great Northern invasion was w. The character of the country made nstruction difficult, and the Canadian Pacific, pealing to national prejudices, fought every h of the way. But Mr Hill pressed on. e coal-fields of the Crow's Nest Pass, in ich he acquired a controlling interest, were ade accessible by a road from the south, and series of lines branching from Spokane tered the Boundary mining region. Wind- in and out across the border the road con- ued westward to Vancouver. Fortunately plication was in large part avoided; by angements with the Canadian Pacific, the

Canadian Northern, and the Northern Paci
the difficult country south of the Fraser v
pierced by common lines, and common termi
facilities were secured. Meanwhile, in 1
and 1907, more ambitious schemes w
announced—the building of north and so
lines through Brandon and Regina, and
construction of an east and west line fr
Winnipeg to the Pacific. In ten years, it v
officially forecasted, the Great Northern wo
have as extensive a system in Canada as
the United States. What was more startli
Mr Hill denounced 'spoon-feeding,' and
not ask for a cent of subsidy. The building
the Grand Trunk Pacific and the Canad
Northern postponed indefinitely these lar
plans. Actual operations were confined to
construction of branches running northward
Manitoba, to Brandon, Morden, and Port
la Prairie, and the acquisition, jointly with
Northern Pacific, of a lease of the Canad
Northern line from Pembina to Winnip
under the name of the Midland, and of t
minals in Winnipeg. Meanwhile, as the m
shows, branches from the main Great North
line nosed up to the border at nearly a do
other places.

The activities, real and projected, of



Bartholomew, Edinr

Great Northern in Canada brought up acutely the question of the interrelations of Canadian and American roads. To some these activities appeared evidences of an infamous plot to drain Canadian traffic southward to United States ports and roads: to others they seemed to be philanthropic endeavours to rescue Western Canada from the clutches of monopoly. They were not, however, due to either political intrigue or knight-errantry, but to the same desire for profit which had led the Canadian Pacific to build up its great system in the western states. Other things being at all equal, it was of course desirable that Canadian traffic should follow Canadian territory to Canadian ports; it was to this end that uncounted millions had been spent. Yet patriotism had a seamy reverse side of political buncombe. Every hint of outside competition in the preserves of railway or industrial corporations in Canada was denounced in interested quarters as dangerous and empire-smashing, while the counter-incursions into the territory of the United States were ignored or regarded as merely normal business enterprise.

As a matter of fact, in 1914 Canadian railways controlled four miles in the United

States for every mile in Canada controlled b railways of the United States. The Canadia Pacific alone owned or leased over five tho sand miles in the United States, chiefly in th northwest, while it had close working agre ments with the Wabash and the New Yor New Haven and Hartford. The Grand Trun controlled over seventeen hundred miles, tw thirds in the Michigan peninsula and the r mainder in New England, while the Canadia Northern ran for some forty miles throug the United States, south of the Lake of th Woods. The American interests in Canad were more scattered, but the Great Norther the Michigan Central, the Père Marquett and the New York Central all developed impo tant Canadian extensions.

In short, the interrelations were certain no more extensive than would have bee expected in the case of two friendly natio lying side by side for three thousand mile connected by ties of speech and by commo commercial and social customs. The on difficulty which arose out of the situation w the division of jurisdiction between the Ra way Commission of Canada and the Intersta Commerce Commission of the United State The heads of the two commissions, Mr Justi

Mabee for Canada and Mr Knapp for the United States, endeavoured in 1910 to work out a plan for joint control, but without final success.

In the past half-century government ownership of railways has been much discussed in Canada, dividing attention with the allied question of railway ownership of the government. It cannot be said that any decisive public opinion or policy has resulted. Important steps toward government ownership have been taken in the last twenty years. The Intercolonial and Prince Edward Island Railways have been retained by the government and extended, a federal line has been built in Manitoba and a provincial one in Northern Ontario, and the National Transcontinental has been constructed by the government for lease to a private company. Yet, at the same time, the main railway projects continued to be entrusted to private companies, and the proportion of the whole mileage under private operation increased.

The most important incident in the Intercolonial's later history was its extension from Quebec to Montreal in 1898, by the purchase of the Drummond County Railway and the lease of a stretch of forty miles in length from

the Grand Trunk. Six years later the Canad
Eastern, running from Gibson to Loggievill
was purchased. Many bankrupt lines in th
Maritime Provinces and Quebec were offere
to the Intercolonial as valuable feeders. I
the later years of the government of S
Wilfrid Laurier and in the first years of S
Robert Borden's administration, authority w
sought to acquire such of these roads as migh
be desired, but restrictions due to the actio
of the Canadian Senate or the political dif
culty of discriminating between the railwa
prevented any rapid acquisition. Changes
administration were tried. As a half-co
cession to the demand that the Intercoloni
should be operated by an independent com
mission, a board of management was esta
lished in 1909, consisting of the chief officia
of the road. In 1913 this board was di
solved and the management vested in a sing
commissioner, F. P. Gutelius, formerly of th
Canadian Pacific.

Financial returns showed little improv
ment. True, the record, unbroken since 187
of annual failure to meet even operating e
penses, was varied after 1898 by small su
pluses in two years out of three, but the n
deficits since Confederation rose to over elev

millions by 1913; and while there was no question that the administration had been improved, there was room for belief that the surpluses had been in part book-keeping ones, obtained by including in the large capital expenditure items properly chargeable to revenue.

At first sight this failure to meet operating expenses, much less to pay interest on the investment, together with constantly increasing capital outlay, seemed to warrant strong condemnation of government methods. And, in truth, a serious indictment could be framed. Efficient government ownership is more difficult in a democratic country where shippers, employees, would-be employees, supply dealers, all have influence over the administration, than it is in a bureaucratic state. Intercolonial employees were given their posts and kept in them by political influence, and their numbers were often as excessive as energy was lacking. Supplies of coal and new land as required were usually purchased from political friends, with an additional margin for campaign contributions;[1] at election times the

[1] The deputy-minister, Mr Collingwood Schreiber, instanced in 1882 an attempt of a farmer, whose claim was nursed by influential politicians, to collect $70,000 for a gravel-pit liberally estimated to be worth $5.

road became a vast political machine. Unde the administration of the governments o Laurier and Borden the grosser scandal ceased, but in one form or other politica influence continued to be exerted.

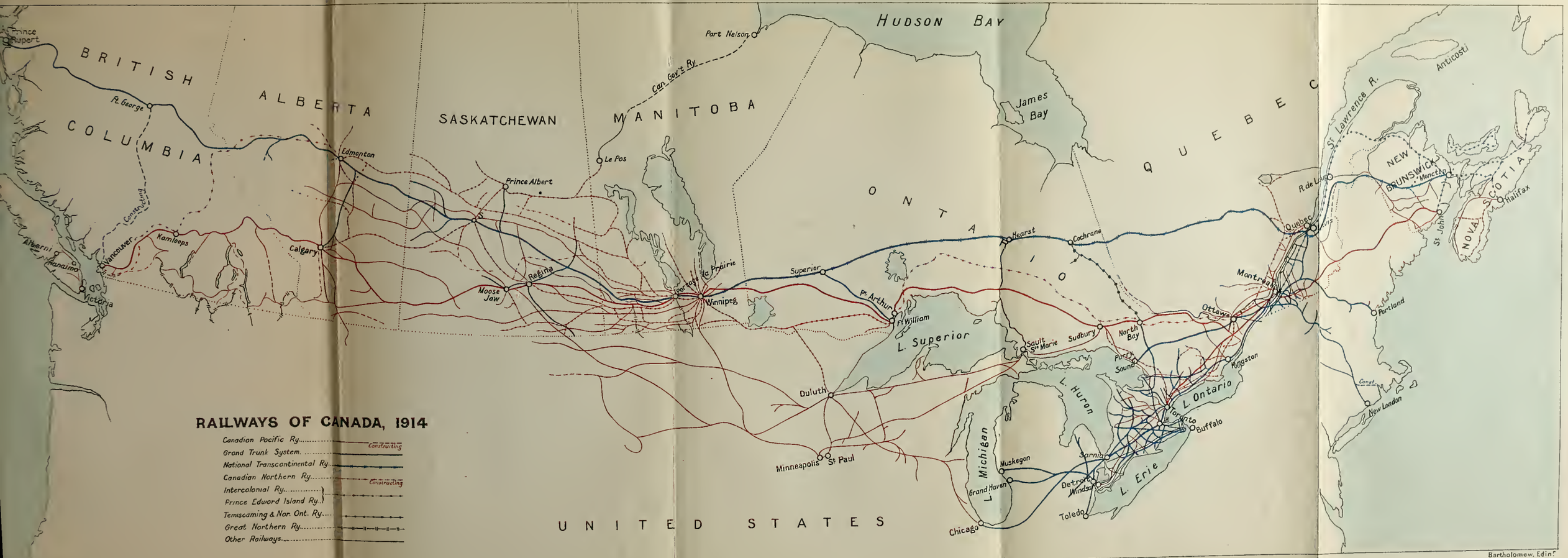
Yet this was not the whole story. If th Intercolonial did not earn dividends, ther were other reasons at work than governmen inefficiency. The road ran for long stretche through barren country where little loca traffic originated. In competing for throug traffic it was handicapped by the roundabou length of its route: it ran along two sides o a triangle, while the Canadian Pacific, subsi dized by one political party, was built alon the base, and the National Transcontinenta built by the other party, came in between in summer it had to face the competition o the St Lawrence route as well. Nor wa dividend-earning the sole standard of succes to be applied. The Intercolonial was buil originally for political and military ends, no merely for commercial gain. It had give shippers the lowest rates in the world: 'th surplus is in the pockets of the people,' on of the political heads declared. If, it wa often urged, the canals of Ontario and Quebe were operated by the government at a dea

loss, without a cent of tolls, why grudge the Maritime Provinces, to whom Confederation had been less kind, the benefit of operating at bare cost the government railways! The Intercolonial had undoubtedly done much to weld the eastern and central provinces together, and this was worth more than a million dollars or two in interest charges.

The desire for rates at cost, or lower, which has made the people in Eastern Canada oppose all suggestions to turn over the Intercolonial to the Canadian Pacific or Canadian Northern, led those of Western Canada to urge government ownership of the other federal venture, the Hudson Bay Railway. Owing to its far northern position, Manitoba possesses ocean ports, Nelson and Churchill, which are nearer Liverpool than New York is. Why, then, carry the grain of the prairie fifteen hundred or two thousand miles to an Atlantic port before loading it on the ocean freighter? Proposals to build a railway to a Hudson Bay port and to establish a steamship line to carry the traffic at sea seemed plausible and won much western support. Investigation soon made the difficulties clear. Hudson Bay was fairly free from ice, but Hudson Straits were studded with icebergs far into the summer.

Ships of special construction would be neede for the dangerous passage, and, in any even grain could not be shipped until the sprin after it was harvested and would have to b stored in elevators during the winter. An in the meantime the three transcontinenta railways were enlarging the eastern funnels while the Panama Canal made an outlet b Vancouver feasible. Still, there was a gam bling chance that something would come of railway to Hudson Bay, and if the strok succeeded, Canada would be given a new coast and would front the sea at the north as wel as at the east and the west. The territor between Le Pas, a terminus of the Canadia Northern, and Port Nelson, selected as th better port on Hudson Bay, had some minera and agricultural promise. So, in the prosper ous days of 1911, it was decided to attemp the work. As it was largely an experiment the government's plan of state constructio and possibly operation found wide support The line was still under construction in 1914.

Another exploration road which amply justified the faith of its promoters was th Timiskaming and Northern Ontario. Thi railway, striking up from North Bay into th mineral region and clay belt beyond the height


HUDSON BAY
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
UNITED STATES
James Bay
L. Superior
L. Michigan
L. Huron
L. Erie
L. Ontario
Prince Rupert
Port Nelson
Can. Gov.t Ry.
Anticosti
St. Lawrence R.
R. George
Edmonton
Le Pos
Prince Albert
Constructing
Vancouver
Kamloops
Calgary
Nanaimo
Victoria
Moose Jaw
Regina
Portage la Prairie
Winnipeg
Superior
Hearst
Cochrane
Pt. Arthur
Ft. William
Sault St. Marie
Sudbury
North Bay
Ottawa
Montreal
Quebec
R. de Loup
NEW BRUNSWICK
Moncton
St. John
NOVA SCOTIA
Halifax
Portland
New London
Toronto
Buffalo
Kingston
Port Sarnia
Sarnia
Detroit
Windsor
Toledo
Chicago
Muskegon
Grand Haven
Duluth
Minneapolis
St. Paul
RAILWAYS OF CANADA, 1914
Canadian Pacific Ry.
Grand Trunk System.
National Transcontinental Ry.
Canadian Northern Ry.
Intercolonial Ry.
Prince Edward Island Ry.
Temiscaming & Nor. Ont. Ry.
Great Northern Ry.
Other Railways.
Constructing
Bartholomew. Edin.r

f-land, was begun by the Ontario government in 1902 as a colonization road. It was ortunate enough to uncover the riches of Cobalt's silver-camp in its construction; later, nining development at Gowganda and Porcuine brought it traffic; and the building of he Grand Trunk Pacific made it an important onnecting link. It was able, then, from the utset to show favourable results, direct as vell as indirect. It was built and controlled y a government commission, efficient and nore or less free from politics.

CHAPTER XIII

SOME GENERAL QUESTIONS

When the pace of construction slackened i 1914, Canada had achieved a remarkab position in the railway world. Only five oth countries—the United States, Russia, German India, and, by a small margin, France— possessed a greater mileage; and, relatively t population, none came anywhere near he Three great systems stretched from coast t coast. Need still existed for local extension but by a great effort the main trunk lines ha been built. Not only in mileage were th railways of Canada notable. In the degre to which the minor roads had been swallowe up by a few dominating systems, in the wid sweep of their outside operations, in the extension beyond the borders of Canada itsel and in the degree to which they had bee built by public aid, they challenged attentio

While there were nearly ninety railwa companies in Canada in 1914, the thre

transcontinental systems controlled more than eighty per cent of the total mileage. The variety of the subsidiary undertakings—steamships, hotels, express service, irrigation and land development, grain elevators—has already been indicated. The control by Canadian railways of seven or eight thousand miles of lines in the United States, with corresponding, if smaller, extensions into Canada by American lines, was an outcome of geographic conditions, intimate social and trade connections, and a civilized view of international relations which no other countries could match.

The aid given by the state had been remarkable in variety and in extent. In cash subsidies alone, up to 1913, municipalities, chiefly in Ontario, had given over $18,000,000; the provinces, in the order of Quebec, Ontario, Nova Scotia, New Brunswick, Manitoba, and British Columbia, double that sum; and the Dominion $163,000,000. Land-grants exceeded fifty million acres. Guarantees reached $275,000,000—the Dominion, British Columbia, Alberta, Saskatchewan, and Manitoba leading—with some sixty millions looming up in the year to follow. The privately owned railways of the Dominion were then capitalized

at a billion and a half; allowing for the 'water' in this capitalization on the one hand, and for construction out of earnings on the other, it may fairly be computed that, omitting the guarantees, the state had contributed from one-third to one-half their cost.

The objections to this policy were manifold. It had been one great source of rottenness in politics. It had pauperized some sections of the country, leading them to look to the government to take the initiative in every movement. The land subsidies had delayed settlement, and the exemption of grants from taxation had pressed heavily on the average settler. The wealth of Canada tended to concentrate in a few dominating groups. Roads were built that were a sheer waste of capital, useless for traffic or colonization, or recklessly cutting into territory sufficient only for existing lines. Yet the profits side of the account was large. Settlement had been hastened, transport facilities had been provided, values had increased, social intercourse had been ameliorated, national unity had been fostered, in ways impossible had private enterprise been left to struggle on unaided. In future, it might be hoped, private capital could build unaided, or the state act directly

In the allied field of government regulation progress had been made. Until very recent years, Canada had been more anxious to get new railways than to control old ones, and, besides, the worse forms of discrimination which stirred indignation in the United States had not been widely practised in Canada. But with the growing complexity of the industrial organization, and the recognition that competition could not solve the difficulties, a demand rose for more efficient regulation. The Dominion government, acting upon an able and thorough report by Dr S. J. M'Lean, established in 1904 a Railway Commission, permanent, non-political, and large enough to make it possible for its members, singly or jointly, to hear complaints in all sections of the Dominion. Later, telegraph, telephone, and express rates and services were added to its jurisdiction. Hampered by few of the constitutional limitations which have lessened the usefulness of the Interstate Commerce Commission, and guided by efficient businesslike heads—Blair, Killam, Mabee, Drayton—it soon established a unique reputation for fairness, promptness, and common sense.

But it is not merely in mileage or in relation-

ship to the state that change has come in th three-quarters of a century since the firs locomotive whistle was heard in Canada. Le us glance at some of the more striking change in equipment and methods of operation. I the road bed, new standards of solidity hav been set, grades cut down and curves straight ened at a cost of uncounted millions, bus stretches double-tracked, steel bridges built i place of wooden trestles. The greatest singl advance was the substitution, in the eightie chiefly, of steel for iron rails, making con struction cheaper and repair easier, and per mitting the running of heavier and faster trains Heavier trains in turn brought heavier rails eighty to one hundred pounds to the yar being the usual weight on main tracks, in stead of forty or fifty in early days. Loco motives grew steadily in size from the *Kitte* of 1837 to the huge *Mallet* of to-day. Freigh engines were differentiated from passenge engines. Coal was substituted for wood a fuel, and in some cases oil for coal. Electricit replaced steam in tunnels and other place where smoke was troublesome. The crud little freight cars, carrying four or five tons gave way to cars carrying thirty tons o more, specialized for all conceivable purposes

from cattle and coal cars and oil tanks to refrigerator cars for fruit or meats or milk. Passenger coaches, following, as in other matters, American rather than English models, underwent a similar change, and improved steadily in size, strength, and convenience. The formal division into classes which marks European railway travel has not taken root in Canada; but between Pullman and parlour cars, first and second classes, the actual variety is great. Train dispatching, at first by telegraph, and latterly by telephone, has become a fine art; safety devices such as the air-brake, and more slowly block signals, have been adopted. The old confusing diversity of local time has been remedied by the adoption of a zone system, in consequence largely of the persistent advocacy of Sir Sandford Fleming. Thus the increase in mileage by no means represents the increase in service rendered: every year the engines grow more powerful, the cars larger and the trains longer, and the freight service more speedy and trustworthy. True, the service is still far from perfect, and when a heavy snowstorm paralyses traffic, or the diversion to new competitive building of money which should have gone into equipment brings about congestion,

vigorous denunciation follows these brief re versions to the traffic conditions of the goo old days.

There is no work that man has wrought tha would give nobler and more enduring title t fame than the great cathedrals which mediæva Europe bequeathed to the world. Yet n man's name is linked with theirs. They wer the work of generations, of an epoch, th expression of the genius and the labour and th worship of uncounted thousands. There is whole world of difference between the mediæva cathedral and the modern railway, but thi they have in common, that they are the wor not of a few hands but of many, not a sudde creation, but the product of labours continue year after year. Leaders were indispensable we cannot forget the men who planned an the men who carried through and the men wh organized the working of the great railwa systems. Keefer and Fleming, Poor an Waddington, Galt and Hincks and Howe Macdonald and Laurier, Mount Stephen an Strathcona, Van Horne and Hays, Shaughness and Mackenzie, these and many more, thoug often bearing feet of clay, we shall honour a builders of a mighty heritage.

But behind these loom up forgotten myriads who also were indispensable. The surveyor, often an explorer as well, striking out into the wilderness, braving sheer precipice and arctic blizzard in search of mountain pass or lower grade; the man with the pick and shovel, a mighty and ever-shifting army—English navvy, Irish canaller, Chinese coolie, Swede or Italian or Ruthenian—housed in noisome bunkhouses, often fleeced by employment agent or plundering sub-contractor, facing sudden death by reckless familiarity with dynamite or slower death by typhoid and dysentery; the men who carried on the humdrum work of every day, track-mending, ticket-punching, engine-stoking; the patient, unmurmuring payer of taxes for endless bonuses—these, too, were perhaps not least among the Railway Builders of Canada.

BIBLIOGRAPHICAL NOTE

THERE are surprisingly few secondary books dealing with Canadian railway history available for the general reader. The admirable treatise by Dr S. J. M'Lean, 'National Highways Overland,' in vol. x of *Canada and its Provinces,* is much the best. Trout, *The Railways of Canada* (1871), and the article by T. C. Keefer in *Eighty Years' Progress of British North America* (1863), are useful for the early period, but are scarce. There is, however, a wealth of first-hand material —pamphlets, travellers' notes, company reports, Hansard debates, committee inquiries, and departmental returns. The largest collections of such material are to be found in the Parliamentary Library, Ottawa, the Library of the Department of Railways and Canals, the Toronto Public Library, and the Library of Queen's University, Kingston.

For progress from year to year since 1901, see Castell Hopkins, *The Canadian Annual Review,* vol. i *et seq.* See also, in this Series, *The Day of Sir John Macdonald* and *The Day of Sir Wilfrid Laurier.*

INDEX

lberta, railways in, 184, 216, 224; grants in aid, 192, 241.
llan, Sir Hugh, and the Pacific Scandal, 122-7.
merica, North, ways of access into, 29-30; and transport development, 30-5.
ngus, R. B., and the Canadian Pacific Syndicate, 135, 136 n., 137, 151.
shburton Treaty, the, 57-8.

lair, Andrew G., minister of Railways, 208.
lake, Edward, his opposition to the C.P.R. contract, 143-5, 157 n.
orden, Sir Robert, and the Canadian Northern, 191, 192.
rassey, Betts, Peto and Jackson, railway contractors in the Maritime Provinces, 66-67, 69, 73, 75; in Canada, 70, 72-6, 79, 80, 81 and note, 83.
ritish Columbia, its terms of union with Canada, 115, 116, 128, 130; railway grants in aid, 192, 241.
roun, Sir Richard, his railway, 58.
uchanan, Isaac, promotes the Great Western, 47.

anada, before the advent of the railway, 12-14, 19-26, 109-113; development of water transport, 14-16, 33-5; of land transport, 16-19; her railway policy, 27-30, 49-55, 64, 69-71, 169-72, 176, 190, 191, 209, 211, 233-9, 241-3; railway building, 36-49, 84-5, 93, 98, 182-3; the Grand Trunk, 71-74, 81-2, 83, 88-90, 94, 187; the Intercolonial, 106-8; the C.P.R., 116, 122-9, 139-50, 158-9, 164-5, 176-7, 224; a 'boom' period, 85, 181-2, 196; the Canadian Northern, 190-1, 192, 194; a period of depression, 197-8, 202; the Grand Trunk Pacific, 206-11, 213-15; railway interrelations with United States, 231, 232-3, 241; government roads, 108, 233-239; Canada's position in the railway world, 240-1. See Railways.
Canada Central Railway, 100, 128, 173.
Canada North-West Land Company, 153.
Canada Southern Railway, 40, 98-9, 104.
Canadian Northern Railway, 92; building of, 183, 185-9, 230, 232; financing of, 190-5; other enterprises, 195, 211.
Canadian Pacific Railway, the great demand for, 114-17; the

survey and route, 117-20, 129, 160-1, 162-3; the Pacific Scandal, 120-7; the syndicate, 130-42, 150-2; terms of building contract, 141-50, 172-173; financing of, 139-42, 147-150, 152-9, 181, 227-8, 236; its construction, 128, 159-68; development eastward, 173-175; further expansion, 175-178, 223-6, 232; and other railways, 139-40, 173-6, 186, 203, 215, 225; the world's foremost transportation system, 220-1, 226-7.
Canadian Pacific Syndicate, the, 130-42, 150-2.
Capreol, F. C., his ingenious financing scheme, 48.
Caraquet Railway Company, 171 n.
Cartier, Sir George, 107; and the C.P.R. contract, 123, 124, 125 n.
Central Vermont Railway, 101, 122 n., 174, 204.
Chamberlin, Edson J., president of the Grand Trunk, 202, 215.
Champlain and St Lawrence Railway, 36-8, 39, 40, 49-50.
Chandler, E. B., 53; his railway mission, 63, 65-6.
Cox, George A., 143, 179.

Elgin, Lord, governor-general of Canada, 72.
England, the locomotive contest in, 1-5; her lead in railway development, 7-10. See Great Britain.
European and North American Railway, 60-2, 64, 68-9, 102, 174.

Farley, Jesse P., and the Canadian Pacific Syndicate, 13 137 n.
Fleming, Sir Sandford, 2 246; and the Intercoloni 56-7, 106-8, 117; and t C.P.R., 114, 117-20, 178.

Galt, Sir A. T., 172; his ra way enterprises, 44, 45, 7 71, 74-6, 77, 81 n., 84, 114, 2
Gladstone, W. E., colon secretary, 59.
Grand Trunk Railway, 3 building and financing 71-84, 87, 94, 95, 97, 9 104-5, 122-3, 187, 232; and t C.P.R., 155, 174, 178-80; low water, 196-9; changes administration and materi 200-2, 218-19; eastern acti ties, 203-5; westward expa sion, 205-6, 208, 211, 2 See Grand Trunk Pacific.
Grand Trunk Pacific, 205; t demand for, 209; question the route, 207-8, 210, 215-1 building and financing 208-9, 211-15, 217.
Grant, Rev. George M., 117
Great Britain, her railway mi age in 1846, 38; her railw policy in Canada, 54-5, 10 in the Maritime Provinc 59, 60, 62-6, 73. See Englan
Great Northern Railway, development in Canada, 1 138, 187, 228-32.
Great Western Railway, buil ing of, 40, 41, 46-7, 54, 55, 6 70, 77, 84, 86-7, 91, 94, 95, 9 99, 104-5; acquired by t Grand Trunk, 179.
Guarantee Acts, to aid ra

way building, 55, 69, 71, 84, 86.
Gutelius, F. P., manager of the Intercolonial, 234.
Gzowski and Co., railway contractors, 77, 81 n.

Hays, Charles M., 246; president of the Grand Trunk, 200-1, 203-4, 206, 212, 215; drowned in the 'Titanic' disaster, 202.
Hill, James J., and the C.P. Syndicate, 133, 134, 136 n., 137 and note, 141, 151, 162; and the Great Northern, 138 n., 228-30.
Hincks, Sir Francis, 52, 53, 246; his railway policy, 53-4, 56, 69, 70-1, 72-3, 88; and railway enterprises, 65-6, 73-6, 122.
Holt, H. S., and the Canadian Northern, 184.
Holton, Luther, his railway enterprises, 70, 71, 74-6, 81 n., 84.
Howe, Joseph, 52, 53, 246; his railway campaign in England, 62-4, 65-6, 69, 70; and state ownership, 66-7; his prophecy, 113.
Howland, Sir William, his railway syndicate, 143, 145.
Hudson, 'King,' railway promoter, 38, 47.
Hudson Bay Railway, 237-8.

Intercolonial Railway, 59-60, 98; building of, 105-8, 179; later development, 233-7.

Jackson, Henry, railway contractor, 73, 75, 76.
Jaffray, Robert, 179.

Keefer, Thomas C., a distinguished engineer, 36, 246.
Kennedy, John S., and the C.P. Syndicate, 132, 136 n., 137 n., 141, 151.
Kittson, Norman W., and the St Paul and Pacific, 133, 134, 136 n.

Lash, Z. A., and the Canadian Northern, 184.
Laurier, Sir Wilfrid, 246; his railway policy, 188, 190, 192, 207, 210.
Liverpool and Manchester Railway, 2-4, 36.

Mabee, Justice, chairman of Railway Commission, 232-3, 243.
M'Carthy, D'Alton, and a Railway Commission, 171.
Macdonald, Sir John, 246; and the C.P.R., 115, 116, 122, 124-6, 128-9, 130, 140, 141-2, 158, 210.
Macdonnell, Allan, railway promoter, 113-14.
M'Intyre, Duncan, and the C.P.R., 139-40, 141, 150, 157.
Mackenzie, Alexander, and the C.P.R., 127-8.
Mackenzie, William, 246; and the Canadian Northern, 183-5, 189-90, 192.
M'Lean, S. J., his report on railways, 243.
M'Mullen, G. W., and the Pacific Scandal, 121-2, 123, 124.
MacNab, Sir Allan, promotes the Great Western, 47, 53, 54, 55.
Macpherson, D. L., his railway

enterprises, 70, 71, 74-6, 81 n., 84, 123-4.
Manitoba, railways of, 176-7, 183, 185, 186, 233, 237; grants in aid, 191, 192, 241.
Mann, Donald, and the Canadian Northern, 183-5, 189-90, 192.
Maritime Provinces, their network of roads, 18; their railway projects and policy, 55-69, 93, 104 n.; and the Intercolonial, 106-8, 237; and the Grand Trunk Pacific, 207-8.
Merritt, W. Hamilton, and the Welland Canal, 90-1.
Midland Railway, 100, 179, 183, 230.
Minnesota venture, the, 131-9.
Mississippi, transport development on the, 31-2.
Mitchell, Peter, and the Intercolonial, 107.
Montreal, and the St Lawrence and Atlantic Railway, 42-4, 60.
Morse, Frank, manager of the Grand Trunk Pacific, 215.
Mount Stephen, Lord, and the C.P. Syndicate, 134-7; and the C.P.R., 139, 140, 141, 150, 157 and note, 221-2, 246.
Municipal Loan Fund, the, 88-90.

National Transcontinental Railway, 172, 233, 236.
New Brunswick, railways in, 67-9, 102, 103 n., 175; grants in aid, 241. See Maritime Provinces.
Northern Railway, building of, 40, 41, 47-8, 55, 69, 84, 87-8, 94, 100, 104 n.; acquired by the Grand Trunk, 179.
Northern Pacific Railway, 116, 121 n., 134, 157, 166, 177, 186, 230.
North-West Rebellion, the, and the C.P.R., 164-5.
Nova Scotia, railways in, 67, 102, 103 n., 188; grants in aid, 192, 241. See Maritime Provinces.

Ontario, railways in, 40, 41, 45-8, 49, 50-1, 80, 89-92, 98-101, 103 n., 175, 216, 233; and the C.P.R. contract, 123; grants in aid, 103 n., 190, 191, 192, 216, 241.
Osler, E. B., and the C.P.R., 151.

Pacific Scandal, the, 120-7.
Palliser, Captain, his mistaken view regarding a railway to the Pacific, 117.
Papineau, L. J., and state ownership of railways, 49.
Peto, Brassey, Betts and Jackson, 66. See Brassey.
Poor, John A., 246; his railway enterprises, 42-4, 60-1, 114.
Pope, John Henry, and the C.P.R., 139, 140, 158.
Prince Edward Island, its railway, 103, 233. See Maritime Provinces.

Quebec, railways in, 36-40, 41-5, 49, 92, 101-2, 103 n.; grants in aid, 103 n., 190-1, 241.
Quebec and Richmond Railway, 75, 80, 81 n.

Railway Commission, the, 171-172, 243.
Railways, development of, 1, 4-

12, 244-6; the gauge question, 95-8; narrow-gauge lines, 98-100, 103, 224; wooden rails, 101-2; railway profits, 50, 79, 82, 86, 94, 95, 121; railway jobbery, 85-6, 170-1 and note, 213, 235 n., 236; grants in aid, 103 and note, 170-1, 241-2; 'ticket scalping,' 172. See under Canada.
Reciprocity Treaty, the, 80.
Richelieu, Cardinal, and the power of steam, 7.
Rivers-Wilson, Sir Charles, president of the Grand Trunk, 199-200, 202.
Robinson, Major, his railway survey, 59-60, 107.
Rogers, Major, his C.P.R. route through the Rockies, 162.
Ross, A. M., and the Grand Trunk, 77, 79.
Ross, James, and the Canadian Northern, 184.
Ross, John, first president of the Grand Trunk, 76.
Rosser, General, and the C.P.R., 152.
Ruskin, John, his opinion of the railway, 11.

Sage, Russell, and the St Paul and Pacific, 132.
St Lawrence, the canal system of the, 15-16, 34-5; river steamers of, 25.
St Lawrence and Atlantic Railway, 40, 41, 42-5, 54, 55, 69, 70, 75-6, 79.
St Paul, Minneapolis and Manitoba Railway, 128, 132, 134, 137, 151, 228. See Great Northern.
Saskatchewan, railways in, 184, 216, 224-5; grants in aid, 192, 241.
Scott, W. L., and the C.P.R., 154.
Shaughnessy, Sir Thomas, president of the C.P.R., 222-223, 246.
Simpson, Sir George, his record journey to the Pacific, 109-12.
Smith, Donald, 133. See Strathcona, Lord.
Stephen, George. See Mount Stephen, Lord.
Stephenson, George, his locomotive triumph, 2-5, 10.
Stickney, A. B., and the C.P.R., 152.
Stockton and Darlington Railway, 2-3, 6.
Strathcona, Lord, 112 n.; and the C.P. Syndicate, 133-4, 141-2, 151, 157, 166, 246.
Surrey Iron Railway, 6.

Taché, E. P., his railway advocacy, 65.
Timiskaming and Northern Ontario Railway, 216, 238-9.
Trans-Canada Railway, 187, 207.
Tupper, Sir Charles, minister of Railways, 139, 140, 141, 146, 158, 170.
Tyler, Sir Henry, president of the Grand Trunk, 140, 199.

United States, their transport development, 25, 32-3; competition with Canada for the western trade, 31-5, 39; railway development, 38, 52-3, 96, 115-16, 121; depression in,

198, 202; interrelations with Canada, 28, 50-1, 232-3.

Van Horne, Sir William, and the C.P.R., 148 n., 152, 159, 161, 164-5, 166, 205, 222, 246.

Waddington, Alfred, railway promoter, 115, 121, 122, 246.

Watkin, Edwin, his Pacific project, 114.

Watt, James, his reciprocating steam-engine, 9.

Young, John, his railway enterprises, 45, 65, 70, 114.

Zimmermann, Samuel, railway contractor, 47.

Printed by T. and A. Constable Ltd., University Press
Edinburgh, Scotland

THE CHRONICLES OF CANADA

Edited by George M. Wrong and H. H. Langton of the University of Toronto

A series of thirty-two freshly-written narratives for popular reading, designed to set forth in historic continuity the principal events and movements in Canada to the outbreak of the World War.

PART I. THE FIRST EUROPEAN VISITORS

1. *The Dawn of Canadian History*
   A Chronicle of Aboriginal Canada
   BY STEPHEN LEACOCK
2. *The Mariner of St Malo*
   A Chronicle of the Voyages of Jacques Cartier
   BY STEPHEN LEACOCK

PART II. THE RISE OF NEW FRANCE

3. *The Founder of New France*
   A Chronicle of Champlain
   BY CHARLES W. COLBY
4. *The Jesuit Missions*
   A Chronicle of the Cross in the Wilderness
   BY THOMAS GUTHRIE MARQUIS
5. *The Seigneurs of Old Canada*
   A Chronicle of New-World Feudalism
   BY WILLIAM BENNETT MUNRO
6. *The Great Intendant*
   A Chronicle of Jean Talon
   BY THOMAS CHAPAIS
7. *The Fighting Governor*
   A Chronicle of Frontenac
   BY CHARLES W. COLBY

The Chronicles of Canada

PART III. THE ENGLISH INVASION

8. *The Great Fortress*
   A Chronicle of Louisbourg
   BY WILLIAM WOOD

9. *The Acadian Exiles*
   A Chronicle of the Land of Evangeline
   BY ARTHUR G. DOUGHTY

10. *The Passing of New France*
    A Chronicle of Montcalm
    BY WILLIAM WOOD

11. *The Winning of Canada*
    A Chronicle of Wolfe
    BY WILLIAM WOOD

PART IV. THE BEGINNINGS OF BRITISH CANADA

12. *The Father of British Canada*
    A Chronicle of Carleton
    BY WILLIAM WOOD

13. *The United Empire Loyalists*
    A Chronicle of the Great Migration
    BY W. STEWART WALLACE

14. *The War with the United States*
    A Chronicle of 1812
    BY WILLIAM WOOD

PART V. THE RED MAN IN CANADA

15. *The War Chief of the Ottawas*
    A Chronicle of the Pontiac War
    BY THOMAS GUTHRIE MARQUIS

16. *The War Chief of the Six Nations*
    A Chronicle of Joseph Brant
    BY LOUIS AUBREY WOOD

17. *Tecumseh*
    A Chronicle of the last Great Leader of his People
    BY ETHEL T. RAYMOND

PART VI. PIONEERS OF THE NORTH AND WEST

18. *The 'Adventurers of England' on Hudson Bay*
A Chronicle of the Fur Trade in the North
BY AGNES C. LAUT

19. *Pathfinders of the Great Plains*
A Chronicle of La Vérendrye and his Sons
BY LAWRENCE J. BURPEE

20. *Adventurers of the Far North*
A Chronicle of the Arctic Seas
BY STEPHEN LEACOCK

21. *The Red River Colony*
A Chronicle of the Beginnings of Manitoba
BY LOUIS AUBREY WOOD

22. *Pioneers of the Pacific Coast*
A Chronicle of Sea Rovers and Fur Hunters
BY AGNES C. LAUT

23. *The Cariboo Trail*
A Chronicle of the Gold-fields of British Columbia
BY AGNES C. LAUT

PART VII. THE STRUGGLE FOR POLITICAL FREEDOM

24. *The Family Compact*
A Chronicle of the Rebellion in Upper Canada
BY W. STEWART WALLACE

25. *The* Patriotes *of* '37
A Chronicle of the Rebellion in Lower Canada
BY ALFRED D. DECELLES

26. *The Tribune of Nova Scotia*
A Chronicle of Joseph Howe
BY WILLIAM LAWSON GRANT

27. *The Winning of Popular Government*
A Chronicle of the Union of 1841
BY ARCHIBALD MACMECHAN

The Chronicles of Canada

PART VIII. THE GROWTH OF NATIONALITY

28. *The Fathers of Confederation*
A Chronicle of the Birth of the Dominion
BY A. H. U. COLQUHOUN

29. *The Day of Sir John Macdonald*
A Chronicle of the First Prime Minister of the Dominion
BY SIR JOSEPH POPE

30. *The Day of Sir Wilfrid Laurier*
A Chronicle of Our Own Times
BY OSCAR D. SKELTON

PART IX. NATIONAL HIGHWAYS

31. *All Afloat*
A Chronicle of Craft and Waterways
BY WILLIAM WOOD

32. *The Railway Builders*
A Chronicle of Overland Highways
BY OSCAR D. SKELTON

Published by
Glasgow, Brook & Company
TORONTO, CANADA

Date Due

FEB 23	RETURN		
APR 20	RETURN		
APR 17	RETURN		
RETURN	FEB 19 '81		

FC 162 C55 V-032 C-7
SKELTON OSCAR DOUGLAS
1878-1941
THE RAILWAY BUILDERS
39458832 CURR HIST